

THE
ARCHITECT
& BUILDING NEWS

IN THIS ISSUE

- ROYAL GOLD MEDAL PRESENTATION
- STUART MILL HOUSE, FINSBURY
- HOUSING AT CHELTENHAM

APRIL 6, 1951 • VOL. 199 • NO. 4294 • ONE SHILLING WEEKLY

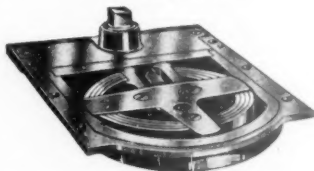


A fine Renaissance door in Broughton Castle

THE *Britannic*

PATENT FLOOR SPRING WITH HYDRAULIC CHECK ACTION

Architects are invited to inspect our display of Door Springs, Floor Springs, etc., recently placed on view in the Building Centre, 9 Conduit Street, London, W.1



WILLIAM NEWMAN & SONS LTD., HOSPITAL STREET, BIRMINGHAM 19

ESTABLISHED 200 YEARS

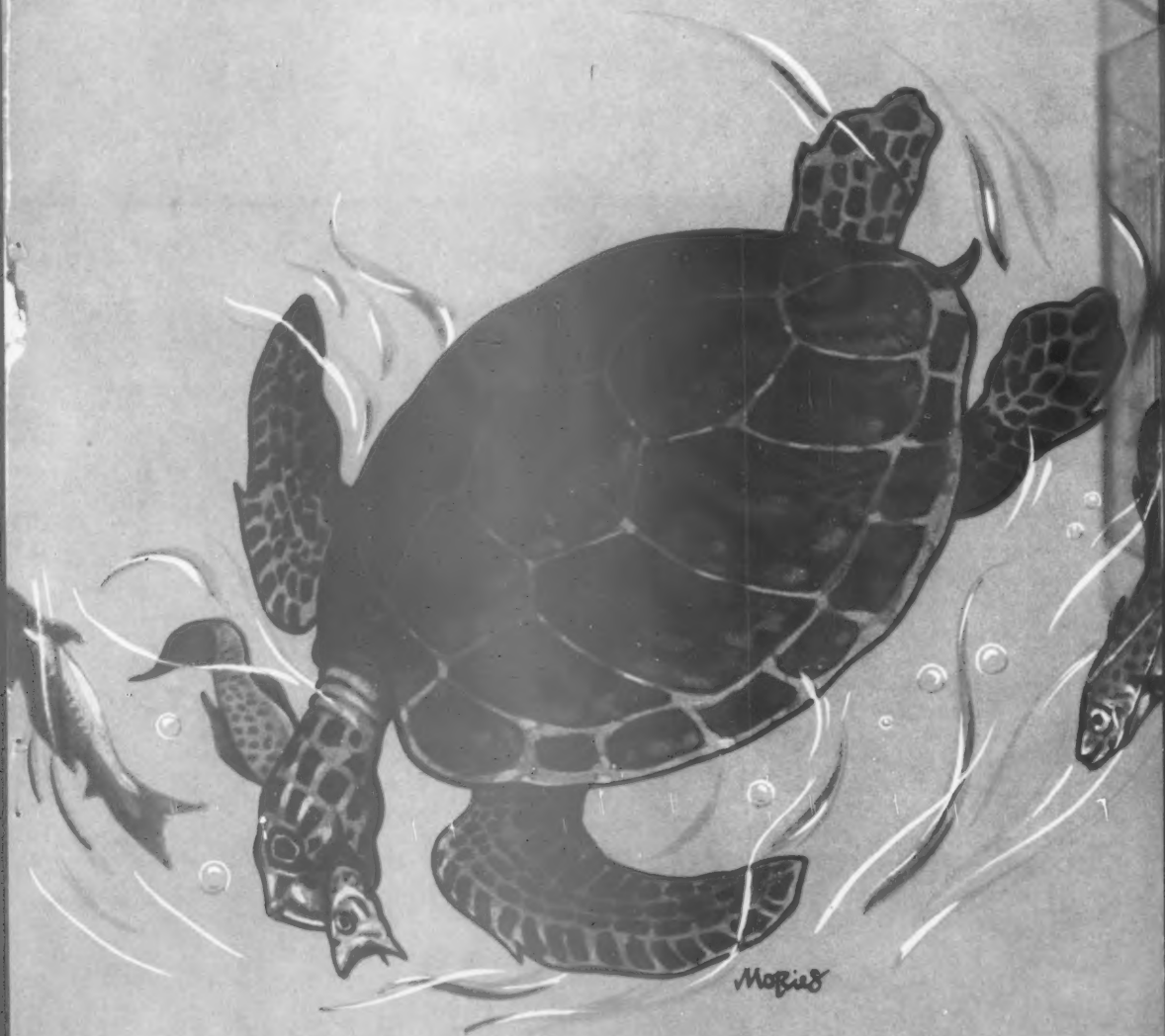


PERMANENT COLOUR is now a feature of Marley Tiles, due to the fixed-coloured granules with which they are surfaced. They can be tested by washing to prove there is no free colour. When these qualities are desired, the Specification should call for "Approved fixed-colour granule-faced concrete tiles."



MARLEY

*The Marley Tile Co. Ltd., London Road, Riverhead, Kent.
Sevenoaks 2251/6*



2

BRINGING COLOUR TO LIFE



The idea that the places where men work with machines should have grimly utilitarian interiors dies very hard indeed. "A well-planned factory colour scheme is still felt to be something of a luxury. And that, of course, is just what it is not. The effective use of colour—

paint applied with a purpose—is as important as good lighting and sound architectural design, of which it should be an integral part. Colour should be the worker's guide, helping him to work with greater speed, accuracy and comfort. In short, good paint means better production.

HERMATOR Super Gloss Paints, for example, are full-bodied free-flowing paints prepared from pigments of the highest purity. They are equally suitable for outdoor work and interior decoration.

DOCKER BROTHERS

Makers of Paints, Lacquers and Varnishes for every purpose

LADYWOOD



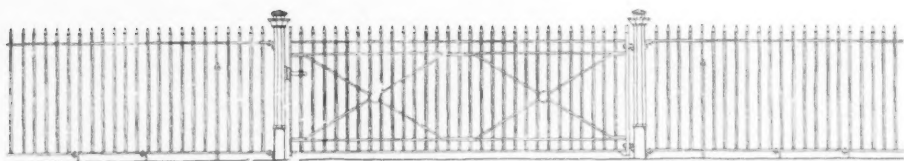
BIRMINGHAM · 16

HIGGS AND HILL
LIMITED

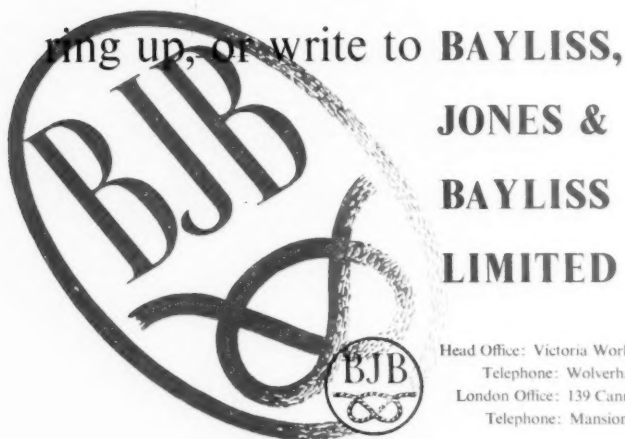
LONDON

LEEDS

COVENTRY

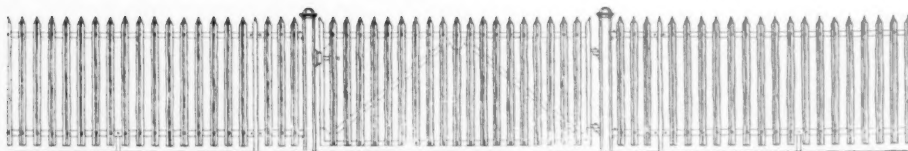


If it's railing or fencing
for industry or for estates,
or for keeping people in or keeping
people out, or keeping people safe,



ring up, or write to **BAYLISS,
JONES &
BAYLISS
LIMITED**

Head Office: Victoria Works, Wolverhampton
Telephone: Wolverhampton 20441
London Office: 139 Cannon Street, E.C.4
Telephone: Mansion House 8524



Men Measures and Cubits

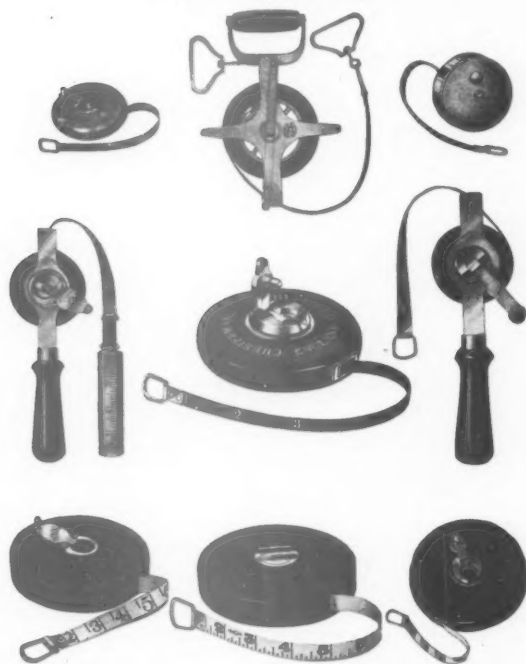
IN ancient times men thought of Measures in Cubits, and particulars of the Egyptian Cubit are recorded in the Great Pyramid which measured 500 Cubits along each side of the base, one side being determined by our Ordnance Surveyors at 760 feet. One Cubit was 18.24 inches and two-thirds of this gives 12.16 inches which was the Olympic foot adopted as a standard by the Greeks, and even now certain foreign countries still call for measures in feet, differing from the Statute English foot of 12 inches.

MEASURES ARE NOW ASSOCIATED THROUGHOUT THE
WORLD WITH

"CHESTERMAN"

and we are glad to proclaim that we are able to go to all "LENGTHS" to meet requirements of our customers for Steel Tapes as although our capacity has been insufficient for some time to meet the great demand, we have much pleasure in announcing that New Factory Extensions are now in Production.

Steel Tape Measures from 25 feet to 330 feet or from 5 metres to 100 metres.
In English or Metric Markings.



Please apply for our Miniature List, Sections 1, 2, and 3, also White Riband Steel Tape Brochure.

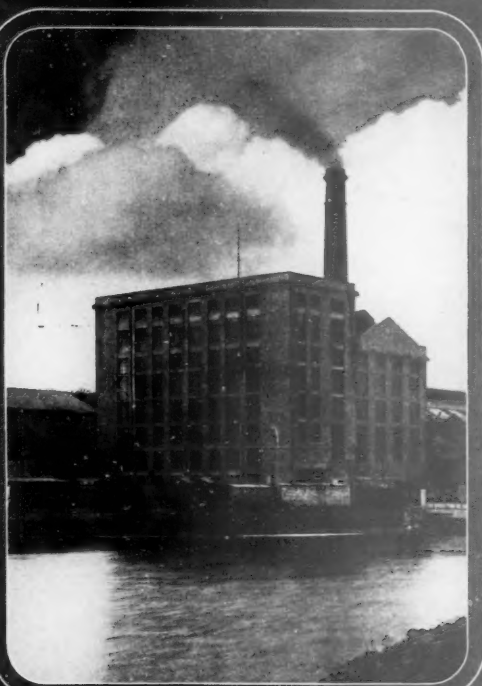
CHESTERMAN STEEL TAPES AND GENERAL MEASURING EQUIPMENT.
Manufactured entirely throughout in our own works. Obtainable through
Stockists throughout the British Isles.

JAMES CHESTERMAN & CO. LIMITED.
SHEFFIELD II. ENGLAND.



BEACON

ZINC SPRAYED FACTORY SASHES



Installed at GUARD BRIDGE PAPER CO. LTD., SCOTLAND
Consultants and Civil Engineers; BLYTHE & BLYTHE, Edinburgh

JOHN THOMPSON BEACON WINDOWS
LIMITED

Ettingshall, Wolverhampton & Imperial House, Kingsway, London, W.C.2

Telephone: BILSTON 41121

Telephone: TEMPLE BAR 3216

ESCALATORS LIFTS

for Passengers,
Goods and Service

BY

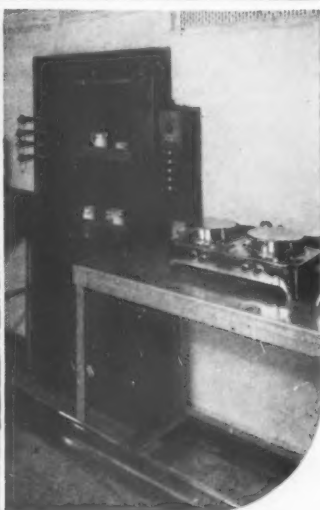
J. & E. HALL

LIMITED

DARTFORD KENT

LONDON OFFICE

10, ST. SWITHIN'S LANE E.C.4



...*that's why I specify Andersons*"



APRIL 30—MAY 11
CASTLE BROMWICH
BIRMINGHAM

SEE OUR EXHIBIT

To most Architects it is a matter of importance that when they deal with Andersons they are able to order an existing roof to be waterproofed or contract for a complete decking. The question of roofing can be unified and dealt with comprehensively, to great advantage.

The more famous systems such as Thermotile and Durodek Promenade Roofings have been specialties with us for a long time, we understand them

thoroughly; but not only can we supply waterproofing for existing roofs, we have perfected complete deckings in steel and aluminium — Thermolok, the latest innovation, is something very special in lightweight construction.

Roofing has been our business for 100 years and we believe our service really makes it worthwhile for Architects to specify Andersons. Our Contract Department welcomes your test of this claim.



Registered
Trade Mark



D. ANDERSON & SON LTD.

STRETFORD MANCHESTER and at London, Belfast, Birmingham, Glasgow, Leeds, Nottingham



Architects, Builders and Public Authorities everywhere are specifying Robbialac Paints to brighten up Britain in this Festival year. These superlative materials are their first choice for the interior and exterior decoration of public buildings, hospitals, schools, factories, offices, shops and homes. For Robbialac Paints give lasting protection and beauty—outside and inside—at no more than the cost of ordinary paints.

LITERATURE, COLOURCARDS, ETC.

Catalogues, colourcards and general literature will be sent gladly on request or are obtainable from leading Builders' and Decorators' Merchants.

ADVISORY SERVICE BUREAU.

This bureau is freely at the disposal of all interested in the selection and application of decorative materials. Technical information and advice is always available.

★
**Make Britain *BRIGHTER* with
ROBBIALAC PAINTS**

JENSON & NICHOLSON LTD., JENSON HOUSE, STRATFORD, LONDON, E.15



Interplanetary interest in
our structures is a possibility—
internationally our **complete**
service is a **FACT**

H. YOUNG
& CO. LTD.

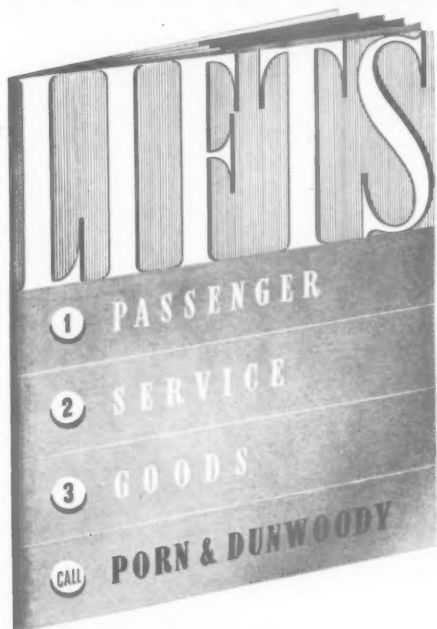
FOR FIRST-CLASS STEELWORK

H. YOUNG & COMPANY LTD., NINE ELMS STEELWORKS, BURWELL ROAD, LONDON, E.10 Tel. Leytonstone 4021



... the sign of a good building

"Information please"



*It's all in this
illustrated
Booklet
free on request
to enquirers*



PORN & DUNWOODY LTD

UNION WORKS

Ref PDL 51/34

Phone Waterloo 7107 (4 lines)

LONDON, S.E.1

BEAR GARDENS

Grams: Inggerma, Sedist, London



Structural Steelwork



APRIL 30—MAY 11
CASTLE BROMWICH
BIRMINGHAM

SEE OUR EXHIBIT

WE DESIGN, MANUFACTURE AND ERECT
ALL CLASSES OF STRUCTURAL STEEL-
WORK, INCLUDING:—

BUILDINGS	TOWERS & TRESTLES
DERRICKS	GANGWAYS
TANK STRUCTURES	LIGHT BRIDGES
PLATFORMS	FIRE-ESCAPE STAIRS
GANTRIES	HAY BARNs
	ETC., ETC.

BOLTED, RIVETED OR WELDED



Large illustration—One of our recent contracts in course of erection.

Inset—A light structure manufactured and erected by us.

One of the wide range of

BRABY

P R O D U C T S



FREDERICK BRABY & COMPANY LTD

FITZROY WORKS, 352 EUSTON ROAD, LONDON N.W.1 TEL: EUSTON 3456

OTHER FACTORIES AT: IDA WORKS, DEPTFORD, LONDON S.E.8 TEL: TIDEWAY 1234 • HAVELOCK WORKS, AINTREE LIVERPOOL 19 TEL: AINTREE 1721 • ECLIPSE WORKS, PETERSHILL RD., GLASGOW, N. TEL: SPRINGBURN 5151 • ASHTON GATE WORKS, BRISTOL 3 TEL: 64041 • ALSO FALKIRK & MOTHERWELL

OTHER OFFICES: 110 CANNON STREET, LONDON E.C.4 (EXPORT) TEL: MANSION HOUSE 6134 • QUEEN'S BUILDINGS, 10 ROYAL AVENUE, BELFAST TEL: 26509 • PALACE STREET, PLYMOUTH TEL: 2261



STEEL REINFORCING BARS

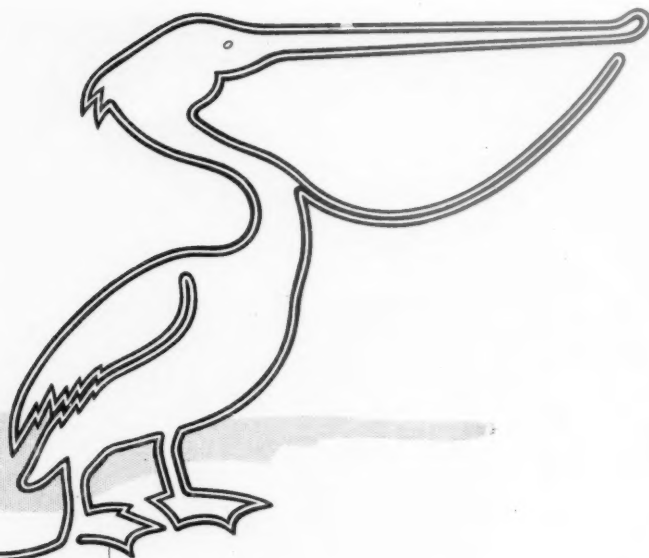
Although we endeavour to maintain the "Stribar" service in reinforcement bars, deliveries from warehouse stocks in the London area are in present conditions not always possible. By a telephone call to Sloane 4533 it is always possible, however, to ascertain the latest position.

THE UNITED
STEEL
COMPANIES LTD

UNITED STRIP & BARMILLS, 8-10, GROSVENOR GARDENS, LONDON, S.W.1

Branch of The United Steel Companies Limited

WORKS • THE ICKLES • SHEFFIELD



A FINE LOAD CARRIER

Crompton

RUBBER CABLE



CROMPTON PARKINSON LIMITED, CROMPTON HOUSE ALDWYCH, LONDON, W.C.2

Telephone: CHAncery 3333

Telegrams: Crompton Estrand, London

Y. J. LOVELL & SON LTD



GERRARDS
CROSS
LONDON
EASTBOURNE

CONTRACTORS FOR STUART MILL HOUSE, FINSBURY

FOR THE FINSBURY BOROUGH COUNCIL

ARCHITECT : JOSEPH EMBERTON, ESQ., F.R.I.B.A.

HIGH WYCOMBE
MARLOW
BEACONSFIELD
HORSHAM
EAST GRINSTEAD



BUILDERS SINCE 1786



The building you need . . .

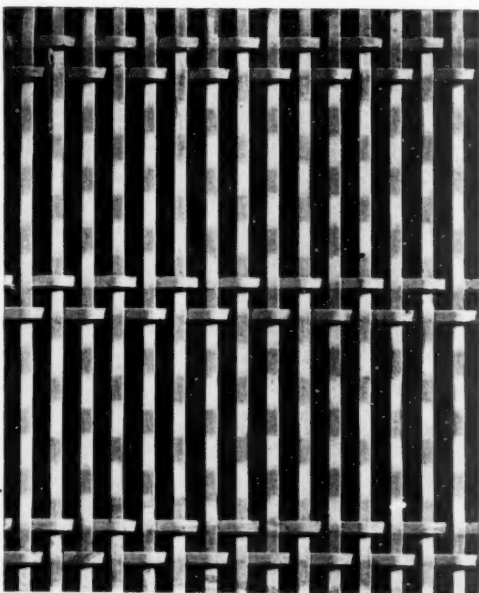
is very likely one of Thorns standard range of Industrial Buildings, which includes new steel structures for factories, stores, garages; timber and asbestos buildings for offices, canteens, halls, etc., and reconditioned Nissen type huts and 'Blister' hangars.

★ Write today, stating details of your requirements and requesting prices of suitable buildings.

THORNS

J. THORN & SONS LTD · Box 113 BRAMPTON ROAD BEXLEYHEATH KENT · Bexleyheath 305

B11-61



HARCO RIBBON WIRE

The artistic effect of Harco Ribbon Wire renders it particularly suitable for use where care of design and appointment are of major importance. Architects will appreciate that it not only screens the unsightly, but allows free circulation of air. The patterns in which Ribbon Wire can be woven, make it the perfect selection for Lift Shaft Enclosures, Ventilating Panels, Radiator Covers, Electric Heater Covers, etc. Illustration shows Pattern No. 1361 W. Other Patterns and full particulars in Catalogue A 744

Harvey

G. A. Harvey & Co. (London) Ltd. Woolwich Road, London, S.E.7



DEVON COAST
COUNTRY CLUB,
PAIGNTON DEVON.

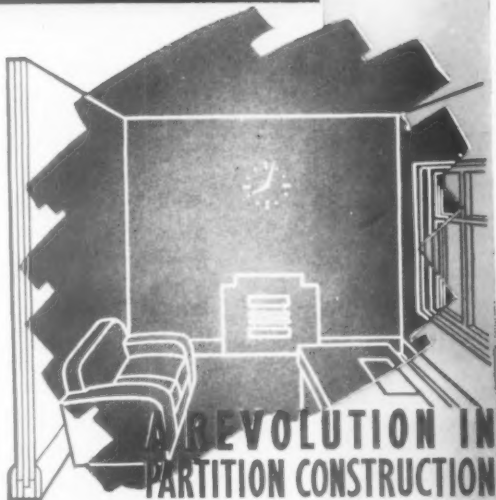
2" "PARAMOUNT" PARTITION
10' 0" HIGH. "PARA-
CLIP" SYSTEM FORMING
CEILING. CLADDING OF
STANCHIONS WITH 8"
"PARAMOUNT" STAND-
ARDS AND TWO COATS
PLASTER.

**FIRE
RESISTING**

**SPACE
SAVING**

"PARAMOUNT" GYP TRADE MARK FIRE-RESISTING TWO-INCH SOLID PARTITION

The modern demand for enduring work and rapid construction dictates larger application of Gypsum products in building and construction work and this is exemplified in the development of "PARAMOUNT" FIRE-RESISTING TWO-INCH SOLID PARTITION. This latest constructional system sets a new standard in partition work and also meets today's need for a low first cost partitioning, combining fire-resistance strength and rigidity.



WRITE FOR SPECIAL LITERATURE



BBB

The new Ascot 709 Multipoint

A TECHNICALLY IMPROVED SUCCESSOR TO THE FAMOUS NEA 32/6

- ★ Built-in gas governor
- ★ Fitted with a completely new thin-flame stainless steel burner
- ★ Wider fin spacing on the new heat exchanger gives more generous flue-ways to obviate choking by deposits
- ★ A redesigned gas section has a single rotary gas control for main and pilot cocks instead of the two horizontal handles



The new stainless steel burner has positive advantages. It is highly resistant to corrosion, so that blockage due to this cause is practically eliminated. The period between essential servicing is thus greatly lengthened, and total expectation of life increased

Stainless steel also gives greater rigidity and strength, which is enhanced in the thin-flame type of burner as there are fewer tubes of larger section.

LONGER SERVICE LIFE • LESS MAINTENANCE



THE STAINLESS STEEL BURNER IS EXCLUSIVE TO ASCOT

ASCOT GAS WATER HEATERS LTD. • 43 PARK ST. • LONDON, W.1 • GRO 4491



Ascot makes the most of gas

THE ARCHITECT & BUILDING NEWS

The Architect and Building News" incorporates the "Architect," founded in 1849, and the "Building News," founded in 1854. The annual subscription, inland and overseas, is £2 15s. 0d. post paid; U.S.A. and Canada \$9.00. Published by ILLIFFE & SONS LTD., DORSET HOUSE, STAMFORD STREET, LONDON S.E.1. Telephone: WATERLOO 3333 (50 lines). Telegrams: "ARCHITONIA, SEDIST, LONDON."

Branch Offices: Coventry: 8-10 Corporation Street; Birmingham: King Edward House, New Street; Manchester: 260 Deansgate, Tel. Blackfriars 4412 (3 lines); Deansgate 3595 (2 lines); Glasgow: 268 Renfield Street

PLANNING AND/OR HOUSING

THE last number of the Journal of the Town and Country Planning Association contained a lively, if somewhat emotional, article by Lady Pepler on the shortage of housing and how that shortage impressed itself on those without homes of their own and how planning in general was producing impatience in the public mind.

The article was a timely reminder that new housing, new towns and new development plans in general are not marching together—at any rate so far as the layman's appreciation is concerned. Lady Pepler appealed for a mass public demand with passion and intensity behind it, and, she avers, that unless the relationship of housing to town planning is dramatically changed by propaganda and the evidence of action, the work, money and vision of our planning pioneers will be wasted.

All this is probably true and fair comment, with which few would disagree; but why is housing always pin-pointed as the major issue and its relationship to planning in general ignored? Mainly we think because it is too easy a plank for the insertion into sectional political platforms. It is a subject easy to summarise in items and figures and, also, it lends itself to sensationalism—in other words it is a perfect sort of vote-catching subject for any political party or local agent to seize upon. Planning in general or the relationship of planning to housing is more difficult to put across; in fact, we imagine that most politicians hate to try and the average local agent would suppress it if he could. It is not so easy a subject to explain in simple language or within the paper-space allowances made to those who nurse constituencies.

Methods like the £1,000 cheap house competition or the Women's Institute house at Olympia serve to focus the public's attention on housing as a separate factor which is little related to the needs of particular national areas of either town or country

and, even less, to the scores of other factors which have to be considered in the preparation of a development plan or in the production of a new town. These methods are also acting, at the moment, as an introduction to the idea of lowering standards of housing in order to reduce costs. In order to get more homes, because they will be cheaper so, we must become slightly less civilized and lower our standards of living by putting up with smaller sizes, less space, fewer cupboards and less equipment, only one w.c. (and that often in the bathroom), dust-bins on the road-front and (except perhaps in the country?) terrace houses everywhere and those (strangely enough) of two storeys only. But it is not only houses that are the problem; the real problems are more intense. Planning should be the real focus of attention—with intensive concentration on urban densities, flatted schools and factories and, above all, flats.

The cost of flats is also too high—it is a much more serious all-time "high" than that of houses. The problem is wider than mere dwellings; it concerns their relationship to many other phases of planning. The use, for example, of "back-land" and other waste areas—urban marginal lands—now unused and derelict in thousands of small areas and patches in the semi-obsolescent developments of the intermediate and even the outer zone-rings of London and other large towns.

The problem is not limited even to the consideration of housing and its planning alone; it is also concerned with rents—current and protected—with subsidies, the cost of national ill-health or sub-standard health and the acceleration by such factors of the inflationary spiral of economics, which is now influenced, in turn, by "butter or guns" policies, now so urgently before the nation. But these wider issues cannot be discussed here—we have not the space—but they exist as economic problems, shouting

for more studious attention and of the strongest influence on planning and housing.

All architects and town and country planners, who are sufficiently altruistic to think intensively about such things, know that all good planning, whether of land or buildings or of methods of production, makes for cheapness and that to get cheaper houses drastic lowering of permanent standards is not necessary. Does the building industry think the same? Do the surveyors, the valuers, the engineers, the responsible Government departments think likewise?

If so, then the answer is for all these various activities to get together a little more—get out of grooves and isolated corners—and confer on planning and planned reorganisation with which to produce the required houses and flats and to see, at the same time that the public knows and understands the efforts being made. Planners have, probably, only themselves to thank if they are becoming mere administrators and not creators—that is the narrow way but a great army cannot travel along it all at the same time. A broader front and greater planning in depth is necessary.

Important contributions have already been made, but they are being forgotten and may moulder

away in store while planning loses itself in a maze of administration under the 1947 Act, within which—is it necessary to recall?—the requisite powers for action—creative action—exist. We refer, as we have before, to the Government Report on the Distribution of Materials and Components, to the Monopolies and Restrictive Practices Commission, to the Working Party's findings and to the Productivity Team's Report. It is not sufficient to pay lip-service to these documents; all of them contain recommendations which are valuable enough to implement in the service of planning and an intensive reorganisation of the building industry and its many ancillaries for the purpose of speedier and greater production and cheaper costs—even in housing.

That the Minister has promised to issue a new memorandum on housing standards and it is rumoured that the Ministry of Health has under consideration a drastic revision of housing subsidies, are significant enough indications of action from the top. The inter-conferences and reorganisations of all related activities we have suggested would seem, reasonably, to come before, and not after, official actions. It would also seem to be up to the professions and to the industry to get the cart to go better, with the horse—and a willing one at that—in front.



The Dover Street elevation of the model of the proposed reconstruction of Quantas Empire Airways premises on the corner of Dover Street and Piccadilly. The architects are James Cubitt and Partners who designed the African Tourist Association's Travel Office next door in Piccadilly.



Messrs. J. Lyons & Company's new tea shop in Lower Regent Street, referred to below.

EVENTS AND COMMENTS

BUILDING RESEARCH CONGRESS

THE number of delegates who have already applied to attend the Building Research Congress to be held in London in September, is so great that the organising committee is considering closing the membership list. Over a thousand people have applied and they include the Directors of Building Research of ten Commonwealth and Continental countries.

Accommodation for the various sessions is causing the committee some concern although the halls of the R.I.B.A., I.C.E., I.Struct.E., R.I.C.S., I.E.E. and L.C.C. have been made available.

JOE LYONS NEW STYLE

MY pictures give some idea of the new Lyons tea shop in Lower Regent Street. For once I succumbed to the national habit of morning coffee and went to see for myself. In general I think it is very well done. There is an air of spaciousness not always present in such places. The colours are pleasant and unobtrusive, but the design of the hat racks, though practical, is rather restless. This is particularly notice-

able on the ground floor, where there are a lot of them. They probably cease to be troublesome when covered with hats.

The biggest improvement in comfort is the reduction of the noise level. All customer space ceilings are covered with acoustic tile with remarkable effect. The ceilings immediately above the service counters are not so treated probably because of steam. This is a pity as most of the noise starts here. Away from the counter talking conditions are ideal. On the ground floor, over the self-service counter, there is an elaborate electric sign which can only be seen by a handful of people, since it runs lengthwise down the narrow part of the shop. It may be a new standard fitting which had to be incorporated. The shop window display is kept low so that there is a good view of the shop from the pavement. The tables, which are shaped to make access easier for those sitting on the wall seats, are plastic veneered. Chairs are by Race. The walls are panelled with a semi-mat narrow fluted plastic sheeting. At least, I think it is plastic.

The business part of the shop has been particularly

well thought out. The self-service counters incorporate a number of new ideas including a properly screened-off queueing space. Trolleys for trays and dirty crockery are neatly designed. The new design has not gone as far as cutlery and crockery but in these days that is perhaps expecting too much.

I do not think that the lighting fittings are entirely satisfactory. There are too many different types and shapes. Seen with the air inlets they produce a rather spotty appearance and detract somewhat from the otherwise very restful atmosphere. Lithographs from the already well known Lyons series decorate the walls in rather over-important frames.

The new shop is certainly a great advance on Lyons' previous try at "contemporary." Tougher critics than I will say that it will date badly. Can anyone show me any contemporary design which will not? The old marble panelled type of shop must have been ideal for cleaning and have required no maintenance. It strikes me that the new one will not be so easy to keep clean and smart, although it looks fine now.

THE FESTIVAL

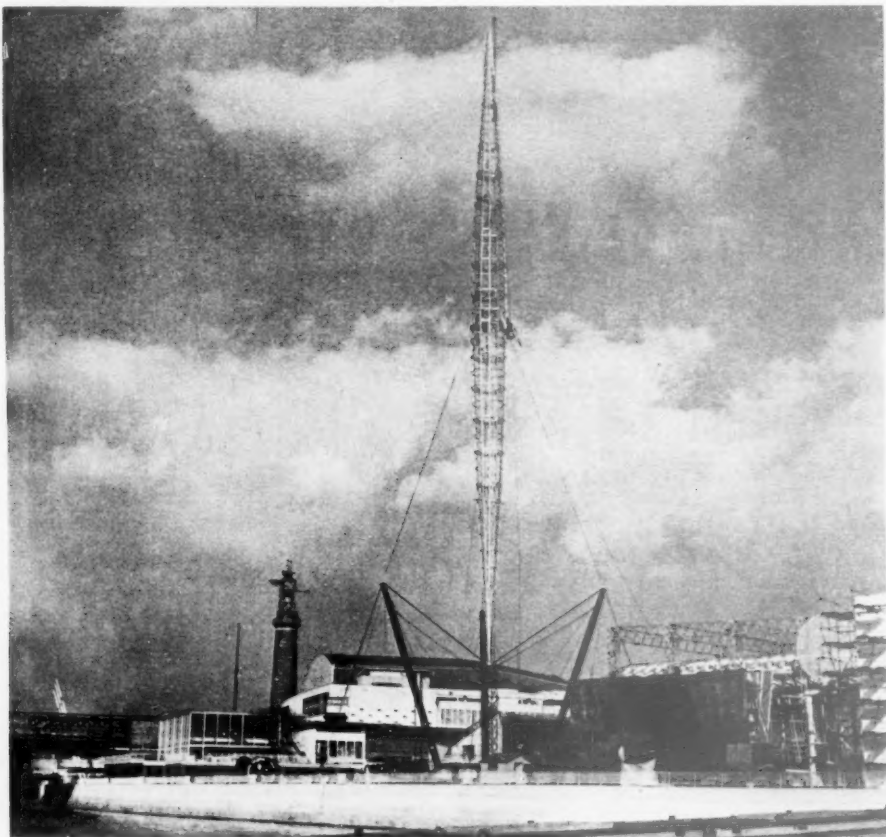
THE Skylon structure is finished and only the louvres remain to be fitted. These louvres are to take the place of the originally planned aluminium lattice cover-

ing. Can anyone be sure that they will not form a vast Aeolian harp when fixed? Perhaps, by a simple, or complicated, system of levers for opening and shutting the louvres, the whole thing could be turned into a lovely new sort of musical instrument or something.

Work on the Exhibition of Industrial Power at the Kelvin Hall, Glasgow, is said to be ten days ahead of schedule. In Canterbury there may be a crisis if some of the good citizens who have grown beards for the pageant have to do their Z training before the pageant. I suggest that anyone so affected might seek a transfer to the Navy.

"ABOUT BRITAIN," F.O.B. GUIDE BOOKS

THE covers of the volumes of this attractive looking series, which is edited by Geoffrey Grigson, carry reproductions of relief maps of such deceptive quality that one expects to feel the hills and valleys when picking them up. The production is good. I cannot generalise about the interior, for I have only examined closely the volume on the Home Counties. It starts with a charming coloured frontispiece of a cricket match, and after a short and useful bibliography has a note on using the book which starts: "This guide book is one of a series 'About Britain,' so, we hope, in a new way. Like the others (there are thirteen altogether) it contains



many photographs, a map, a gazetteer, and illustrated strip-maps of the most convenient itineraries. And it begins with a portrait of the district—an account of many of the facts about it which are worth knowing and many of the things which are worth seeing." Later it says: "If the country includes Birmingham, Glasgow or Belfast, it includes Stonehenge. If it contains Durham Cathedral it contains coal mines, iron foundries, and the newest of factories devising all the goods of a developing civilisation. If it includes remnants of medieval forest, it includes also the new forests of conifers transforming acres of useless land"; and later still: "It is the living country of to-day which these guide books emphasise, the place and the people, not only the country of the past or the exquisitely varied..." The books are clearly not intended as guides to good English, and, in view of the claim to emphasise the living Britain, it is interesting to note that the only twentieth-century architecture illustrated in this particular volume is an aerial view of a typical London suburb and not very inspiring pictures of Welwyn Garden City and the Ford factory at Dagenham, all of which are pre-1939. There is a lot of closely packed information in the "Portrait" section by R. S. R. Fitter, but the illustrations to the suggested tours are pitiful, and the notes both pitiful and inaccurate. For example, "Hastings and St. Leonards have utilised their cliff-backed sea coast and good communications inland to build up a prosperous seaside resort," and on the next page: "Like many South Coast resorts, Eastbourne has utilised a combination of cliffs and seafront as a basis for its holiday activities"; and the next page: "The seaside resort of Worthing, unlike Brighton, Eastbourne and Hastings, has no cliffs." More and better information can be obtained by members of the Automobile Association for nothing. The gazetteer is a very slight affair which, among other things, refers to the Bexhill pavilion as "one of the notable example of architectural modernism in Great Britain," and put Canterbury Cricket Week in July.

I very much hope that the other twelve volumes in this series are an improvement on this one, otherwise the preface writer's hope that the books will be useful far beyond the Festival year is unlikely to be even partially fulfilled.

STEAM ON THE NATIONAL GALLERY

WITH hissing intakes of breath some architects have been shaking their heads over the use of steam-jets for cleaning the stonework of the National Gallery. I am afraid that this shows that they have not been studying their B.R.S. Digests. Just to make quite sure, I asked the M.O.W., and they evidently had read Digest No. 21, for they told me that it was the combination of steam and chemicals used some years ago which was so harmful to stonework. Pure steam, which is harmless enough, is being used on the National Gallery because one of the main problems on this particular job is the removal of pigeon droppings.

The question of what to do about the ever-increasing numbers of starlings which insist on roosting round about Trafalgar Square is, I understand, exercising the Westminster City Council and others. Electrified mats have been considered, but these would surely only persuade the survivors to go and bother someone else. What is needed is an inquiry into the starlings' reasons for choosing this particular spot. They should be consulted; let a Gallup poll be taken.

ARCHITECTURE AT THE R.A.

AN evening paper recently stated that the architectural exhibits for this year's Academy were being selected by Arthur Davis. My information is that Mr. Davis has been ill for some time and that the selection is actually being made by Vincent Harris and Brian O'Rourke.

CHEAPEST IN THE WORLD

I HEAR that cement prices are likely to go up by two shillings a ton almost immediately.* The Minister of Works, who controls the price, has, it is said, already held up the increase for more than a month. A further increase is expected in May. In spite of this the price of cement in Britain will still be the lowest in the world, but the Government will have to think twice before using this argument to answer complaints.

HOSPITALITY AT HOME

THE Tea Centre has been altered by Jane Drew and Maxwell Fry so that it is not now necessary to go up the back stairs to arrive in the gallery. The first exhibition since the alterations was opened last week by Gerald Barry and is a joint C.o.I.D.-Tea Centre affair. The theme is "Hospitality at Home," and a number of rooms are shown prepared for a variety of entertainments from breakfast to bed-time. For once, the sparse and tidy C.o.I.D. lay-out has been left for something approaching natural living conditions. The only difference being that if we had all the gadgets and furniture shown we should count ourselves very well off. Much of the furniture and equipment has been seen before and is already on sale in the shops. A comprehensive catalogue which is also a price-list costs a shilling. If you have plenty of time it will amuse you to identify the objects with the list; if you are in a hurry you will wish that the exhibits were numbered. By modern standards prices are not high. I found that a number of the things I marked in my catalogue were new and not yet generally available. In spite of this it is, I think, the best show yet of what is good and obtainable. I liked very much the idea of looking down into some of the furnished rooms. The exhibition was designed by Roger and Robert Nicholson.

ELECTROLUMINESCENT

THIS delicious new word has been coined in America to describe a new method of lighting. The idea is that special electricity-conducting glass is made to give off light by coating it with what is called a "phosphor" and a number of other things. The intensity of light is low so that if a room was to be properly lit it would be necessary to cover the entire ceiling or a wall with lighting panels. Actual commercial installations are said to be some years off, but "decorative effects"—and can't you see them—are on their way.

ABNER

* The Minister of Works has authorised the following price increases following rises in costs:—

Cement. Two shillings per ton for Ordinary Portland and Rapid Hardening Cement, operating from March 29.
Cast Iron Baths. Two and a half per cent. in maximum selling prices, from March 15.

Sanitary Fireclay Ware. Seven and a half per cent. in the overall maximum selling prices, from March 24.

Roofing Felts and Dampcourses. Five per cent. in the maximum selling prices of roofing felts and dampcourses made to British Standard specifications by members of the Association of British Roofing Felt Manufacturers, from March 27.

NEWS OF THE WEEK

The Improvements and Town Planning Committee of the City of London Corporation has recommended the granting of planning permission for the building of Bucklersbury House, a building of 14 storeys maximum height to occupy two and a third acres on a site bounded by Queen Victoria Street, Bucklersbury, Walbrook, Cannon Street, Tower Royal and Queen Street. The cost is reported to be estimated at £8 million. The architect is Mr. O. Campbell Jones, F.R.I.B.A., F.R.I.C.S., and the main contractors will be Messrs. Humphreys Ltd.

It will be a steel framed structure faced with stone and designs will be submitted for approval to the City Common Council, the L.C.C., and the Royal Fine Art Commission.

The Walker Art Gallery, Liverpool, is to be reopened in July after twelve years' service as a food and fuel office. Alterations and improvements to the Gallery are now well advanced. Two of the main rooms, intended for their permanent exhibition, were decorated and hung for the recent visit of H.R.H. The Duchess of Kent; from these it can be seen that, after the opening, the pictures (many of them acquired while the Gallery has been closed) will be well lit.

New artificial lighting in troughs suspended from the ceiling enables the pictures to be hung at a comfortable height for viewers. Laylights of lightly patterned glass obscure the ugly skylights in the roof while providing well diffused natural light in the rooms.

Architectural treatment and colour schemes have appropriately been kept subservient to the need for displaying the pictures to advantage. Walls are covered with canvas painted in plain colours with neutral grey on architraves and skirtings.

On the ground floor one room, with separate entrance from the street, is being converted into a lecture hall. In some cases unsafe floors have necessitated costly reconstruction. New windows have been cut under the pediment of the entrance to give light to the sculpture gallery. But the money spent has been concentrated on essentials. The result promises to be an economical rebirth of a gallery of national as well as local importance. The alterations are being carried out under the supervision of Dr. Ronald Bradbury, City Architect and Director of Housing.

At the annual general meeting of the Royal Society of British Sculptors, held on March 28, 1951, at 6 Queen Square, W.C.1, Mr. Wm. C. H. King was re-elected President for the ensuing year.

The following were elected to Fellowship of the Society: Miss Charlotte Gibson, Mr. G. E. Campbell, Mr. Denis C. Dunlop, Mr. Alan Durst, Mr. Bennett Ingram.

At this meeting the Society elected six new Associates: Miss Ruth Windmiller, Mr. Douglas R. Bisset, Mr. Allan G. King, Mr. C. O. Pilkington



MR. E. G. DEAN

the M.O.W. officer who is acting as technical consultant to the L.M.B.A., to give short notice advice on builders' problems, was appointed Structural Engineer in the Chief Scientific Adviser's Division of the Ministry of Works in 1946. His present duties in the Ministry are the collection, examination and dissemination of the results of research and development in the field of building. Mr. Dean was elected an Associate of the Institution of Structural Engineers in 1939 and a Licentiate of the Royal Institute of British Architects in 1945. He is a member of the Prestressed Concrete Development Group.

Jackson, Mr. S. Birnie Stewart, Mr. Albert Willetts.

The Best Work of the Year Medal (for 1950) (in gold) was presented to Mr. Wm. McMillan, R.A., F.R.B.S.

The Minister of Local Government and Planning has informed the Gloucestershire County Council that he intends to approve an order making certain parts of the county an area of special control in the matter of outdoor advertisements.

The Eccles Sketch Prize and Unsworth Essay Prize awarded by the Liverpool Architectural Society have been won by Glyn Roberts, of Rock Ferry High School, and A. C. Gordon, of Wirral Grammar School respectively.

OBITUARY

The death was announced on March 26 of Walter Oscar Langbeim, L.R.I.B.A., at Ashford, aged 81.

The death was announced on March 26 of Mr. R. G. Hammond, F.R.I.B.A., of Hove, aged 83.

CORRECTION

On p. 360 in last week's issue it was stated that the Minister of Works called on the cement manufacturers to deliver 2.2 million tons of cement in the present year. This should have been 9.2 million tons.

Mr. E. D. Jefferies Mathews, F.R.I.B.A., A.R.I.C.S., has been elected chairman of the Architects' Registration Council.

Mr. W. H. Kininmonth, F.R.I.B.A., of Edinburgh, has been appointed architect for the new town hall for Elgin.

As from April 6, 1951, the style of Culpin & Son will be changed to Clifford Culpin & Partner. The partners will remain as at present, Mr. Clifford E. Culpin, F.R.I.B.A., and Mr. W. W. Ryder, A.R.I.B.A.

The Bath & Portland Stone Firms Ltd. announce that as a result of general material prices and national wage increases, as from April 2, ex quarry prices for Bath, Portland, Doulling and Beer block stone will be increased by 4d. per ft. cube. Prices will in future apply to Portland stone of 20 ft. average and other stones of 25 ft. average.

COMING EVENTS

The Housing Centre

● April 10, at 1.15 p.m. "Delinquency and Housing Conditions." Speaker: Miss M. M. H. Smith.

Royal Institute of British Architects

● April 10, at 6 p.m. "Some Technical Problems arising in the Building of a New Town." Speaker: G. Grenfell Baines.

● April 12, at 2.30 p.m. A Discussion Meeting and Exhibition on "The Housing Needs of Old People." The Exhibition will remain open until April 28.

Institute of Sanitary Engineers

● April 10, at 6.30 p.m., at Caxton Hall, Westminster. Sessional Meeting. "Sanitation in Multi-Storey Buildings." Speaker: H. E. Gooding.

London Master Builders Association

● April 11, at 12.45 p.m., at Derry & Toms Restaurant, Kensington High Street, W.8. Central Area No. 1 General Meeting.

Institution of Structural Engineers

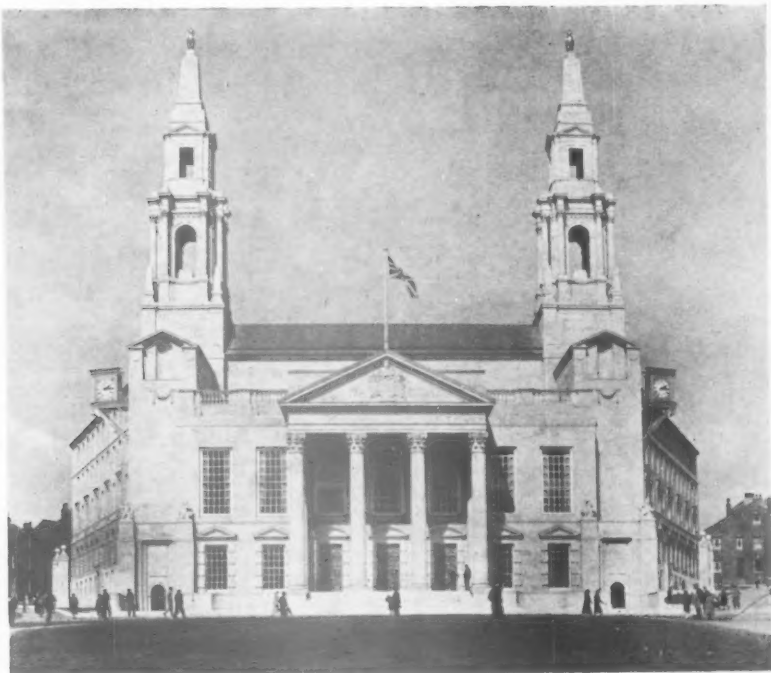
● April 12, at 5.55 p.m. "The Design and Construction of a Large Span Prestressed Concrete Shell Roof." Speakers: Lt.-Colonel G. W. Kirkland and A. Goldstein.

Architectural Association

● April 12, at 8.30 p.m. Annual Reception.

Harold Hill Estate Tour

The Housing Centre Trust has arranged with the L.C.C. a visit for students and others interested in housing to Harold Hill Estate on Wednesday, April 18, leaving the Housing Centre 13 Suffolk Street at 2 p.m. and returning at approximately 5.30 p.m. The inclusive charge is 5s. 6d. A few places may still be available and can be booked with the Housing Centre, Whitehall 2881-3.



Leeds Civic Hall, 1933.

PRESENTATION OF THE ROYAL GOLD MEDAL

THE Royal Gold Medal for the promotion of Architecture was presented to Mr. E. Vincent Harris, O.B.E., R.A., F.R.I.B.A., by the President of the R.I.B.A., Mr. Graham Henderson, at a meeting at the Royal Institute last Tuesday.

Mr. Vincent Harris, who is the hundred and second recipient, had as his escort two previous Royal Gold Medalists, Sir Percy Thomas and Mr. Edward Maufe. Speakers called upon by the P.R.I.B.A. were Sir Gerald Kelly, P.R.A.; Dr. John Murray, Principal of the Exeter and S.W. of England University; Sir Basil Gibson, of Sheffield; Mr Robert Lyne, Lord Mayor Elect of Bristol; and Sir Percy Thomas.

Sir Percy Thomas, O.B.E., HON.L.L.D., P.P.R.I.B.A.: "I imagine the President has asked me to say a word as a contemporary of Vincent Harris and a fellow competitor over many years. Vincent Harris made his mark, like so many members of this Institute, through the medium of the open architectural competition, and I think his earliest success happened to be in my own city of Cardiff.

"I shall say very little of his work. We of his age know and admire him. It is the breath of simplicity which always made it beautiful and removed it from the commonplace and the orthodox. I think that his elevations, whatever the modern generation may think, were quite easily the finest between the two wars, and his planning, which we forget about sometimes, will stand comparison with any in any age.

"I have only to add my own congratulations to Vincent Harris whom I have known for many years on at last receiving this Gold Medal, and to the Institute for their recognition—if somewhat belated—of the very fine work which he has done."

Mr. E. Vincent Harris, in reply, said: "Behind all that has been said lies clearly the belief which we architects have in the work of the Royal Institute of British Architects, to which we all belong and to which each and every one of us

owes allegiance. The democratic spirit of this Institute and what it stands for in architecture is worth reflecting upon and worth consideration on an occasion such as this. The Institute was founded on faith, and it can only be sustained by faith. To-day we are being urged to attempt a new architecture, free from architectural tradition. This Institute has never pretended to be a source of architectural criticism in the sense of judging what is good or what is not good in architecture. I think that the bond which unites its members is the bond of architecture. That does not mean to say that each architect agrees with this or that individual architect's work, but it does mean that between each and every architect there is that bond of architecture. When the work which is now held in abeyance owing to the rearmament programme springs into life again, I hope that the new architecture will gain inspiration from the past and create the forms of the present."

The professional career of Mr. Vincent Harris is one of continuous and unparalleled success in the field of architectural competitions. He was still in his early twenties when he was placed second in the competition for Torquay Town Hall. He was again second in the Devonport Town Hall Competition. With Thomas Moodie he won the competition for Glamorganshire Town Hall, built in 1911, and went on to win competitions for the following: Headquarters Fire Station, Cardiff; The Board of Trade Offices on the Embankment, 1914; Taunton Science School; Public Hall, Tunbridge Wells; Memorial Hall, Sheffield; Manchester Library and City Hall Extension. Other important buildings designed by Mr. Vincent Harris before the war included Surrey County Hall, Kingston; Leeds Civic Hall; Braintree Town Hall and the Council Chamber, Essex County Hall; Municipal Buildings, Bristol. Since the war he has designed extensions to the universities of Durham and Exeter and South West England.



Manchester City Library and Extension to City Hall, 1938

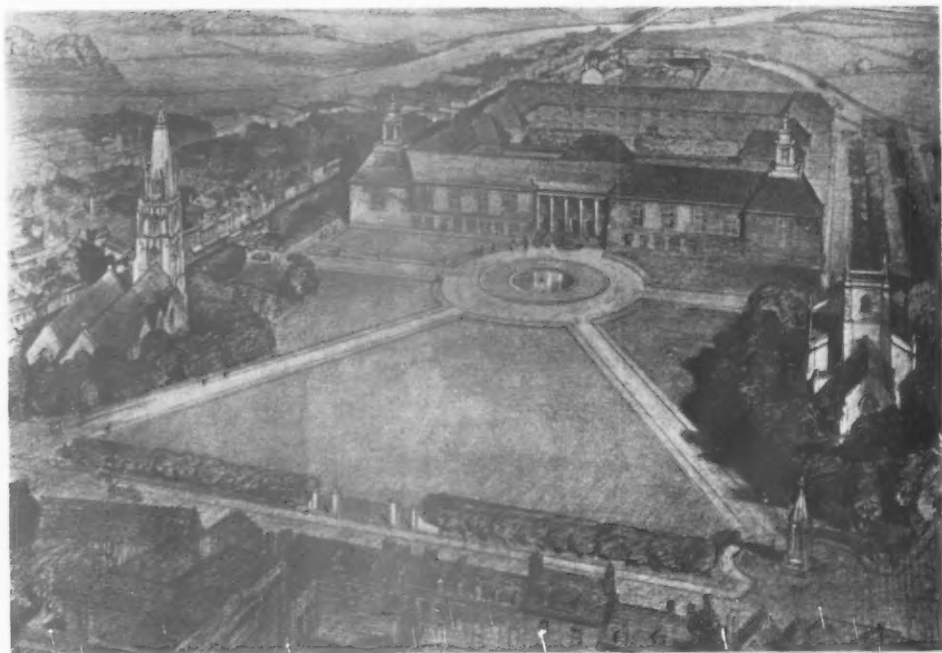


The Council House, College Green, Bristol, commenced before the war and now nearing completion

S O M E E X A M P L E S O F T H E W O R K



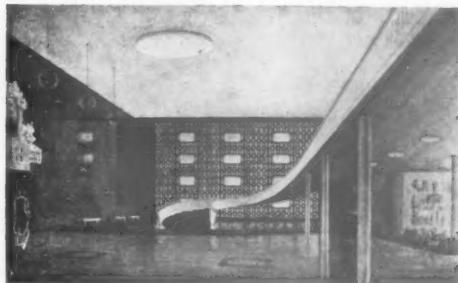
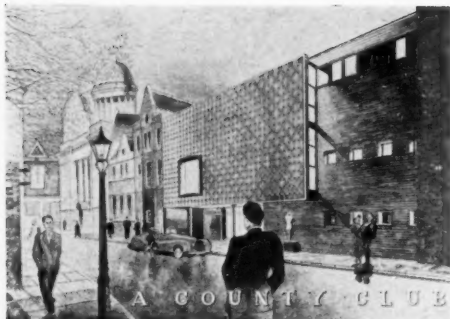
Design exhibited at the Royal Academy in 1939 for the Shire Hall, Nottingham



Design exhibited at the Royal Academy in 1937 for Civic Centre and Art Gallery for Gloucester

O F E . V I N C E N T H A R R I S , R . A .

LEICESTER SCHOOL OF ARCHITECTURE



Two 5th year drawings by students at the Leicester School of Architecture; Left: "A Country Club" by J. S. Williams; Right: "A Civic Hall," by H. G. Cooper. Other examples of students' work are shown on the next two pages

C O R R E S P O N D E N C E

Modular Co-ordination

To the Editor of A. & B.N.

Sir,—There are many angles and facets to the question of modular co-ordination that will be debated by those—and there are obviously many—who have given serious consideration to the questions involved. I only wish to touch on one of these, namely the basic question of whether modular design in its more comprehensive aspects is a good thing for architecture as an art.

Personally, I do not think it is. I believe that the architect can and does seek and use harmonious relationships both instinctively and consciously; and if this be a module it is a private one related solely to the job in hand. I do not believe that the character and physiognomy of buildings, infinitely varied and subtle as they should be, can be fully expressed on the basis of a fixed modular dimension; and Bacon's excellent beauty achieved through a slight strangeness in the proportions is not to be realised by a subordination of the designer's freedom to any rule that may eliminate just that element of personal proportion which makes a building come alive.

I think that one way to regard such questions is to imagine modular systems carried to an extreme—*ad absurdum*—and then to realise that what might ultimately emerge would be an official system of modular units (no doubt administered by a Ministry of Modulutions) to which everyone must adhere on the score of achieving low cost. Economy itself can become a fetish. It is imposed upon us by necessity, but with each step in this direction we tend downwards towards a new low level. The arguments are always so plausible, so convincing. But let us again follow economy to its ultimate goal, and we will find at the end of it a "package" building. Why not package painting (limited to six utility colours) and package sculpture (limit of size, modular blocks, made of artificial stone or bronze substitute conforming to B.S.I. standards)?

My own instinct—I am bound to write personally—is to react immediately and strongly against all restrictions in design as such. We have had to put up for years with standard sized windows, and now there is a loosening up of their dimensions with an alternative range of sizes available. Surely that is because the manufacturers—who have performed a very real service in research and development—have come to recognise that in many simple buildings the openings call the tune; and no architect with an urge to design likes to play the same tune all the time.

I believe in being able to buy wall-boards, blocks and other components in a range of sizes, much as they exist at present. They can be cut or adjusted within reasonable limits. I do not like the idea of 8 ft. 3 in., 36 in., or 40 in. being introduced as immutable standards, for the reason that these things are likely to be the thin edge of a possibly disastrous wedge.

I have written at this length, not to air my own views, but in the hope of encouraging my colleagues, young and old, to express opinions on the architectural implications of these developments.

I am, etc.,
HOWARD ROBERTSON.

Electric Floor Heating

To the Editor of A. & B.N.

Sir,—It seems to me that in spite of Mr. Donald Smith's insistence on the undesirability of "planning inside water-tight compartments" and of the desirability of "recognising a conflict where it exists," he is guilty of doing the former and of imagining a conflict where it does not exist.

Apart from the fact that the Electrical Authorities do not "incessantly push" electric space heating, it is simply not true to say that electricity is the most costly form of space and water heating without qualifying the particular application.

Mr. Smith compares electricity, coal fires, gas fires and central heating for heating a building. But what build-

ing? Does one use coal or gas fires for heating a modern factory or use central heating for a living-room on a chilly Spring or Autumn day? There is, in fact, no conflict; each method has its reasonable and justifiable applications and to claim that central heating is the answer to all is surely to "plan in a water-tight compartment."

So far as water heating is concerned, the Building Research Station experiments have shown that for the quantity of hot water people seem to desire electricity is cheaper to the consumer and uses less raw coal than a centralised system during the summer.

As to the figures given, it may be that between 23% and 27% of the total units generated in this country is used for space heating. No definite figures are available and it is futile to argue about guesses.

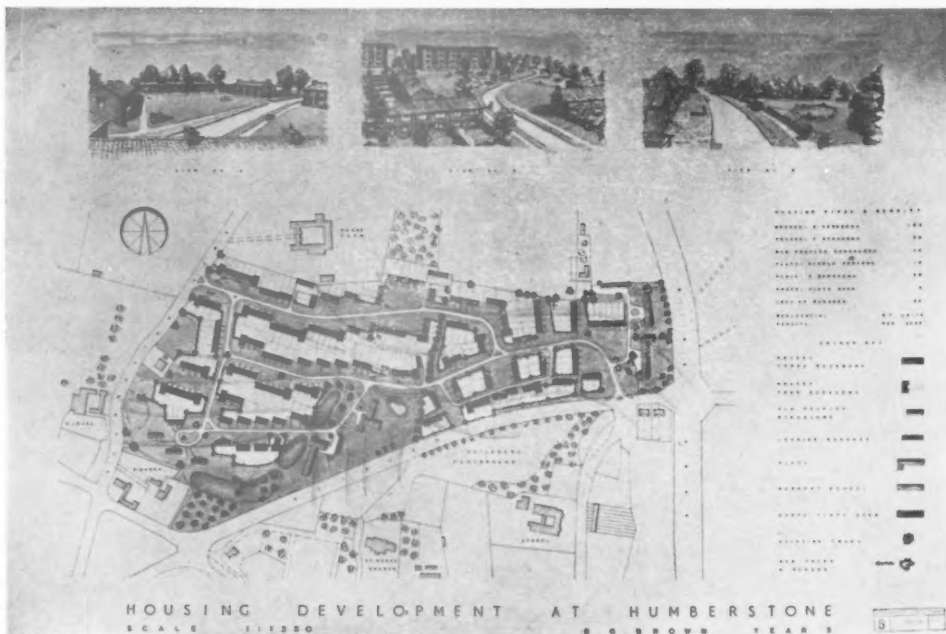
With the implication that electric space heating wastes more fuel than alternative methods, I must definitely disagree. Electric heating is largely used for intermittent, short-period heating where it often shows an economy in fuel-consumption over alternative methods.

The solution to the fuel problem is to use the right method in the right place; there is no one reasonable method of heating applicable to all cases.

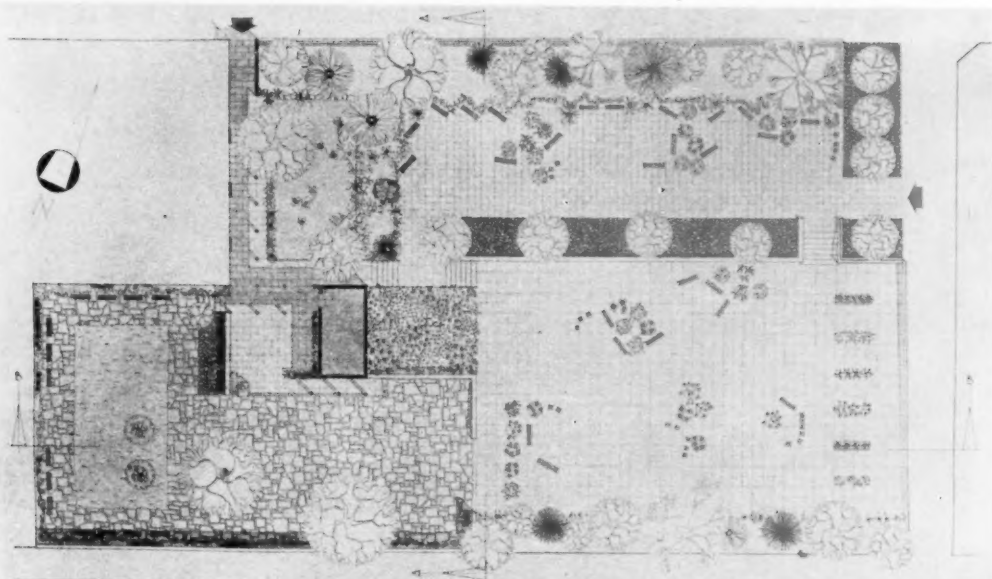
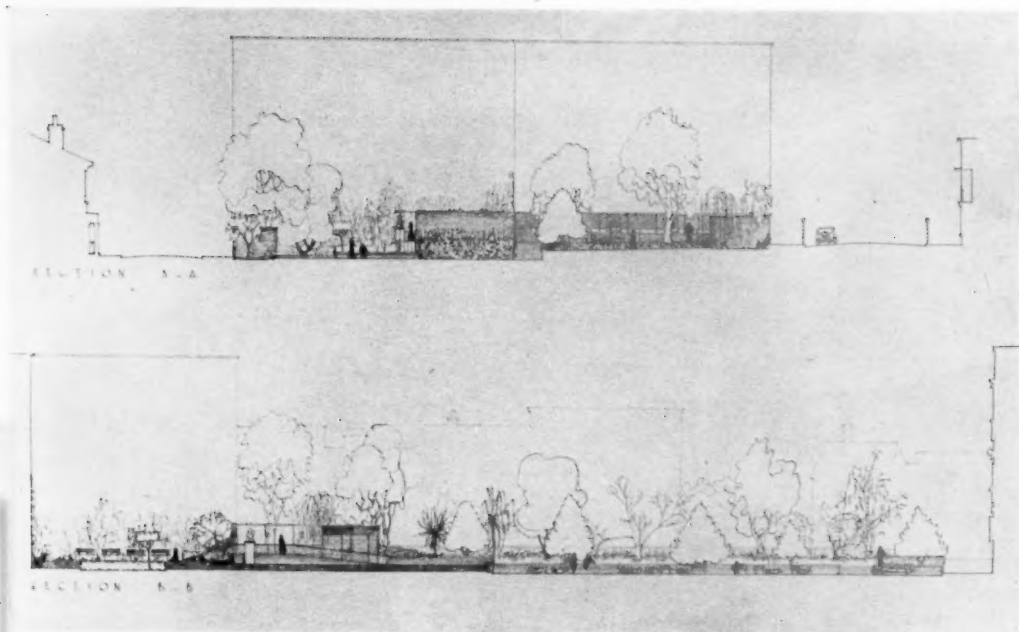
I am, etc.,
E. M. ACKERY.

Saltire Society

Housing Design Commendation. One of the earliest acts of the Saltire Society was to institute an annual award for merit in the design of local authority housing in Scotland. The award takes the form of a plaque attached to the building and two illuminated diplomas, one to hang in the local authorities' offices and one for presentation to the architect responsible for the scheme. The award has been offered again this year. The Councils are asked to supply photographs to the Honorary Secretary, Saltire Society, Gladstone Land, 483 Lawn Market, Edinburgh, by April 14.



Top picture: 2nd year Diploma Course design by T. M. Ogrodnik
Bottom picture: 5th year Diploma Course design by B. G. Brown



A MEMORIAL GARDEN

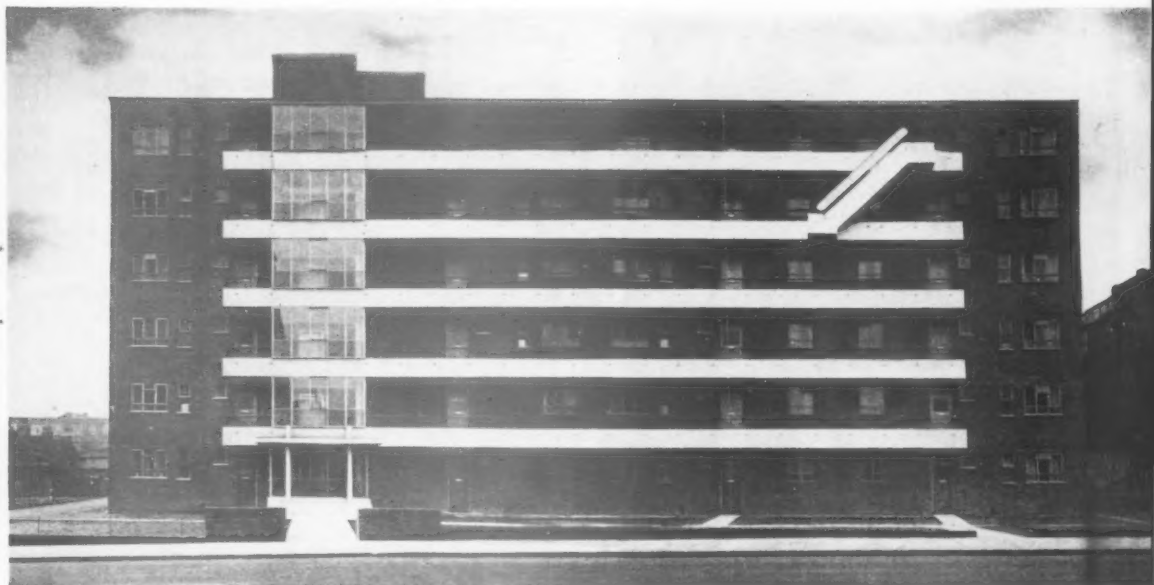
DECORATIVE MARBLE FEDERATION COMPETITION

WILSON, BRIDGES, ASSOCIATES, LEICESTER SCHOOL OF ARCHITECTURE

PLAN OF SITE
1/4" = 1' SCALE

4th year Diploma Course : Design awarded 1st prize of £100 in the Decorative Marble Federation Competition, by W. Briscoe

Leicester School of Architecture



STUART MILL HOUSE, KILLICK STREET, N.1 for Finsbury Borough Council

architect:

JOSEPH EMBERTON F.R.I.B.A.

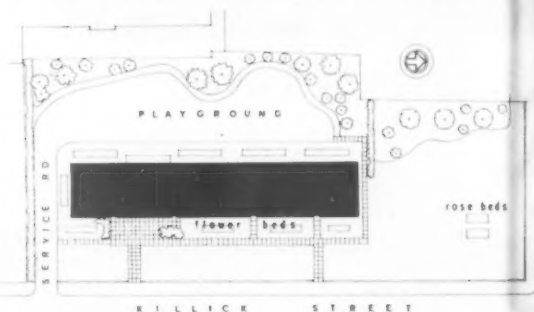
THE site for these flats was expensive and made maximum development necessary. The permitted density is 130 persons per acre and accommodation is provided for 108 persons in 24 flats on approximately $\frac{1}{2}$ acre. Town planning angles for daylighting in relation to existing buildings and streets determined the position and height of the building within narrow limits. An equal number of 3-room and 4-room flats is provided as these types are in greatest demand on the Council's housing list.

The building was first planned to give direct access to all flats from two lifts at a cost within the Ministry of Health ceiling figure. To reduce the cost and provide lower rents it was replanned with balcony access and one lift. Bedrooms are kept away from party walls. The Kitchens are planned with space for a dining table so that they may be used as Dining and second Living Rooms.

The 8-passenger lift takes prams and there is pram storage space in each flat instead of communal storage at ground level.

Gas wash boilers and gas drying cupboards in each flat give complete self-contained laundry facilities.

Kitchens are well fitted with cupboards and double-sided dresser sideboard unit with service hatch between Kitchen and Living Room. There is space for a built-in refrigerator if one is desired.



CONSTRUCTION

The framework is of in situ reinforced concrete with hollow tile floors and roof. The roof is covered with screed insulation board and asphalt. External walls are panel cavity walls with flint facing brick outer skin and 3 in. vibrated clinker block inner skin. Party walls are cavity construction with two skins of clinker blocks insulated from the structure with fibre board at top and ends and on felt at the foot. Living room floors have $1\frac{1}{2}$ in. screed on 1 in. fibre glass mat.

The small external stair from fifth to fourth floor meets the fire escape requirement for alternative means of escape.

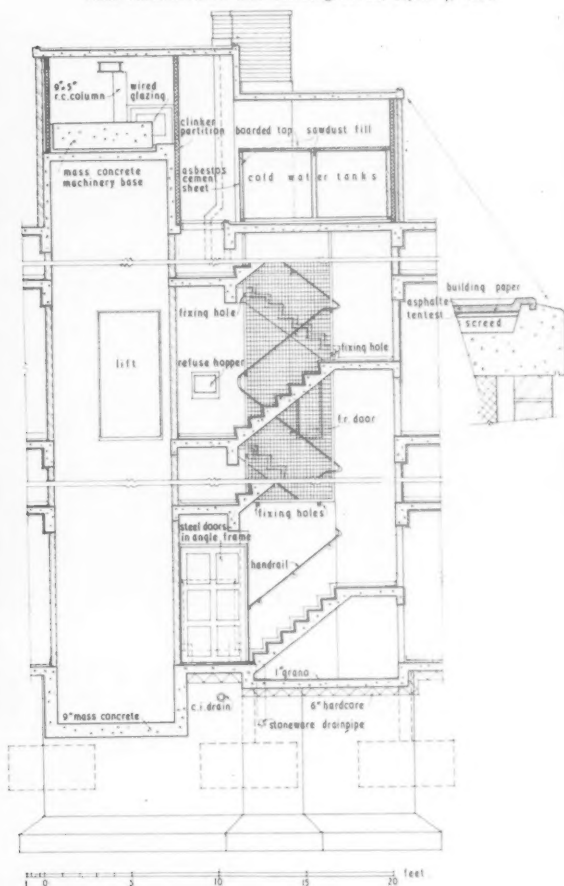
INTERNAL FINISH

Floors: Internally 9 in. x 9 in. brown Accotile on screed throughout. Balconies—Hardened asphalt. Stairs—Granolithic.

Walls: Generally plaster with one coat washable flat wall finish in a variety of colour schemes. Kitchens and



The main entrance with glazed screens above to protect the lift opening



View from South-East



STUART
MILL
HOUSE,
FINSBURY

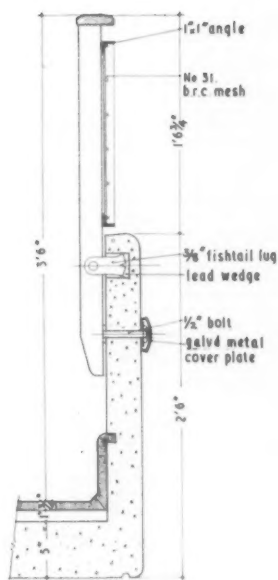


FIFTH FLOOR



GROUND FLOOR

10 20 30 40 50 FEET



bathrooms—Plaster painted. Stairs—Fair faced brick. Ceilings: Plaster and flat finish.

Doors and Frames: Standard wood panel doors in standard metal frames.

SERVICES

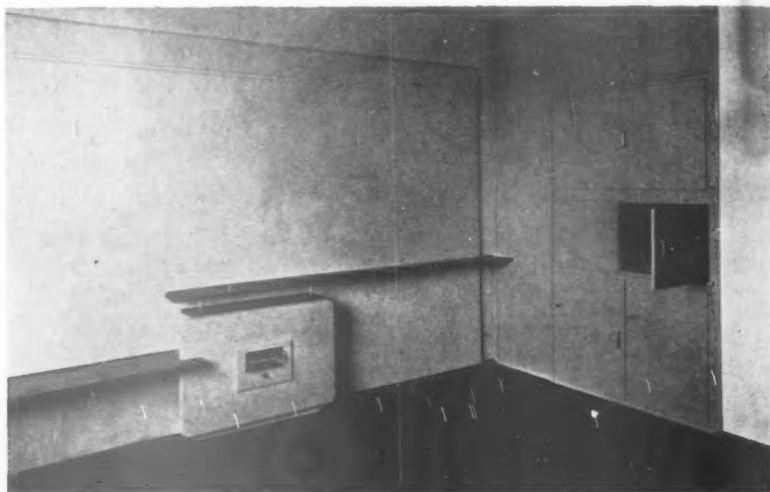
Heating is by accelerated low pressure hot water system with solid fuel boiler and automatic hopper feed stoker, providing background heating in Living Rooms

only, to give 55 deg. F. inside when 32 deg. F. outside. Topping up is by 1-kw. built-in electric fire in Living Rooms. There are power points for electric fires in all bedrooms. Hot water is provided by individual 25-gal. calorifiers in each flat to prevent waste.

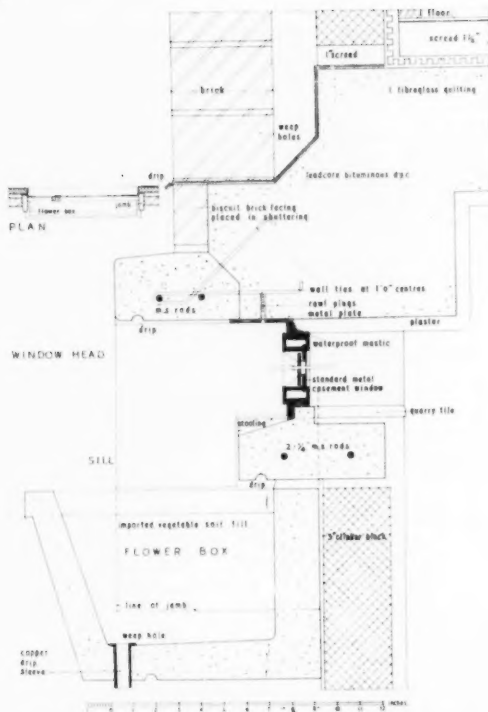
All plumbing and drainage is carried internally in four ducts.

Refuse disposal is by chute with hoppers on all floors for use with the Paladin container system.

Typical living room showing electric fire surround in terrazzo with hardwood shelves and double sided fitting between living room and kitchen



architect
JOSEPH
EMBERTON
F.R.I.B.A.



GENERAL CONTRACTOR: Y. J. LOVELL & SON LTD.

Asphalt: Pilkington Bros. Ltd.
 Boilers: Ideal Boilers & Radiators Ltd.
 Bricks—Facing: Uxbridge Flint Brick Co. Ltd.
 Central Heating: Carrier Ross Engineering Co. Ltd.
 Damp Courses: Ruberoid Co. Ltd.
 Door Furniture: James Gibbon Ltd.
 Electric Wiring: Bective Electrical Co. Ltd.
 Electric Heating: Electroway Electric Fires Ltd.
 Foundations and Reinforced Concrete: Caxton Floors Co. Ltd.
 Gas Fixtures and Fittings: North Thames Gas Board.
 Glass: Aygee Ltd.
 Joinery: Peerless Built in Furniture Ltd.
 Lifts: Bennie Lift Co. Ltd.
 Mantels: Hall & Co.
 Metalwork: Clark, Hunt & Co. Ltd.
 Partitions and Concrete Blocks: Broad Acheson Ltd.
 Precast Concrete: Emerson & Norris Ltd.
 Plumbing: Messrs. G. A. Haden & Sons Ltd.
 Patent Flooring: Armstrong Cork Co. Ltd.
 Sanitary Fittings: John Bolding & Son Ltd.
 Signs: The Lettering Centre.
 Waterproofing: Quickset Water Sealers Ltd.
 Windows: Crittall Manufacturing Co. Ltd.
 Window Furniture: Crittall Manufacturing Co. Ltd.

**STUART MILL HOUSE
FINSBURY**

West elevation and detail of living room window with flower box



HOUSING AT BISHOPS CLEEVE

Near CHELTENHAM, GLOUCESTERSHIRE

architects: T. P. BENNETT and SON

At the beginning of the war Messrs. S. Smith & Sons (England) Ltd. erected a factory near the village of Bishops Cleeve, some four miles out of Cheltenham.

During the war the large labour force employed by the Company had been housed in houses, caravan camp and hostel, but in 1945 it became apparent that the provision of permanent housing near to the factory would become a matter of urgency. It was decided to form the Housing Association in 1946 and the Cheltenham Rural District Council agreed to participate, providing housing for Messrs. Smith's employees on a ratio of four of Messrs. Smith's employees to one Council nominee.

The site now under development is situated near the old village of Bishops Cleeve some ½ mile from the main factory. The site has been laid out to ensure that the village atmosphere is maintained, with a green and proposed shopping centre and other amenities. The layout knits in with a local authority development which was already under way and joins itself to the old village at its northern outlet.

The Association decided that their immediate requirement was three-bedroom semi-detached houses and two types were agreed. Both types (types "B" and "C") are in accordance with the general practice and recommendations of the Housing Manual and the Ministry of Health, and have a floor area of approximately 1,000 ft. super.

In Section 1 Contract, 76 of these types were built. The second section incorporated terrace type development as well as semi-detached houses. The terraces which consist of two and three-bedroom house units, are in blocks of four and six houses. A secondary green was introduced flanked by these terrace blocks, and the whole of the second contract comprised 30

terrace houses and a further 44 semi-detached three-bedroom houses. The terrace houses were completed by June 1950 and the 44 semi-detached houses in February 1951.

The third section and the completion of the Estate within its present boundaries comprises another 132 houses. A two-bedroom semi-detached type has been introduced which has become increasingly popular with tenants because it provides adequate accommodation for a small family and the opportunity for a reduced rental.

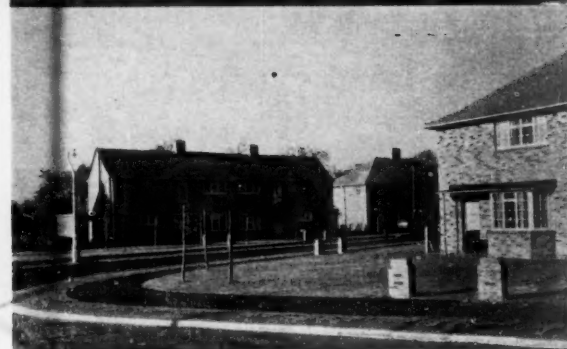
The road and sewer works for this contract are well advanced and the houses are at present under construction.

In addition to the housing, there are sites for garages, shops, a public house, small church and a Sunday school. Extension of the layout has been allowed for to the north, south and west, but on eastern boundary it is restricted by the main Evesham road. A buffer of some 200 to 300 feet of orchard exists between this main road and the housing scheme.

GENERAL CONTRACTOR: TAYLOR WOODROW (HOMES) LTD.

Bricks: H. J. Greenhams Ltd.
Door Furniture: Comyn Ching & Company.
Electrical Work: John Hearson & Co. Ltd.
Felt Sheetting (flat roofs): Eversel Products.
Fireplaces and Surrounds: M. Finch & Company.
Flooring (Asphalte): Durable Asphalte Co.
Gas Points: South Western Gas Board.
Paint: Hadfields (Merton) Ltd.
Plastering: A.C.V. Telling (Bristol) Ltd.
Roof Tiling: Marley Tile Company.
Sanitary Fittings: Stilsons Sanitary Fittings Ltd.
Switch Distribution Boxes and Immersion Heaters: Midland Electricity Board.
Wall Tiling (internal): Carter & Co. (London) Ltd.
Windows and Doors: Builders Supply Company (Hayes) Ltd.





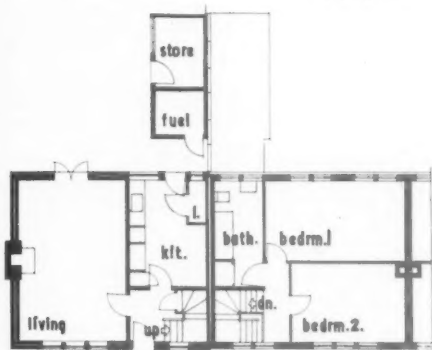
Top: Bishops Drive and Woodmans Way. "B" type and "C" type centre view. Middle: View from entrance to Estate. Junction of Bishops Drive and Two Hedges Lane. "B" type. Bottom: Corner of Woodmans Way and Bishops Drive, "C" type houses.

HOUSING AT BISHOPS CLEEVE CHELTENHAM



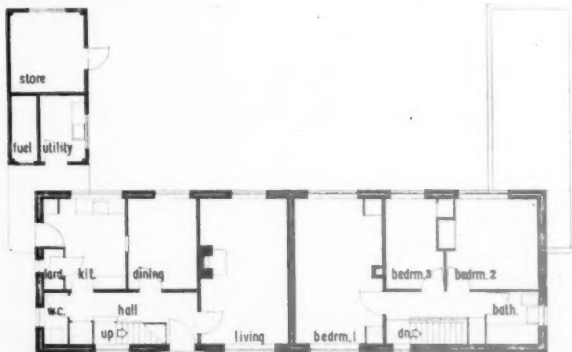
scale 0 1 2 3 4 5 10 15 20 25 feet

TYPE "B"



TERRACE HOUSES

Below: TYPE "C"



POINTS FROM PAPERS

PLANNING AS AN INSTRUMENT OF POLICY

Extracts from a paper read by SIR GEORGE PEPLER, C.B., F.R.I.C.S.,

Hon. A.R.I.B.A., P.P.T.P.I., to the Town Planning Institute, on April 5.

NO member of the Institute needs to be reminded that worthwhile Town and Country Planning must express a well thought out and clearly defined policy. One of our difficulties, however, is that this is not yet always appreciated by our masters, the should-be policy makers, national, local or personal. Another difficulty is that in so far as these masters have thought out policies in their respective fields of responsibility, they may have to be convinced that "the whole is greater than the part" and therefore give and take between them will be essential.

Policy is framed in order to achieve an end, which may be social, economic or visual, or a blend of two or of all three. In so far, however, as such policy affects the use of land it must take into account the form, shape and quality of the land itself. These attributes of land are the concern of the town planner and he must make the framers of policy aware of them and emphasise their importance in the framing of policy. Unfortunately this is not so easy as it sounds, because even now the obvious fact that land is the ultimate platform of all human activity is not fully appreciated.

In advising the framers of policy, the town planner must have in mind not only the character of the land itself but also the fact that one of the attributes of right use must be visual satisfaction. Once policy has been decided upon, it is the job of the town planner to organize, with colleague specialists, a thorough survey of all relevant factors and then design a plan. A plan which will match use and site and provide a pattern of land use in which agriculture will take its rightful place and on which the engineer, architect and landscape architect will be able to create works and buildings efficiently, economically and to their heart's desire.

National Policy

Fortunately there is a directive towards national policy as presumably the Minister of Local Government and Planning inherits the functions of the Minister of Town and Country Planning, whom he has superseded, and who was "charged with the duty of securing consistency and continuity in the framing and execution of a national policy with respect to the use and development of land throughout England and Wales."

... the responsibilities of the Minister make him in effect the keystone of the arch linking national and local policies.

Let us now consider some matters of national policy directly related to town and country planning, accepting as axiomatic the need for strict economy in the use of our limited land resources.

Employment

The Government Departments principally concerned are the Ministry of Labour, the Board of Trade (manufacturing industry and trade in general, including the tourist industry), the Ministry of Agriculture and Fisheries, the Ministry of Fuel and Power (coal, gas and electricity). The Minister of Local Government and Planning appears to have taken under his wing surface worked and quarried minerals, with a view to co-ordinating their claims with those of other land users. However, when for example the extraction of limestone is in question in relation to cement making, the Minister of Works has a say.

We now have a national policy of full employment and many workers interpret this as always implying bringing work to the worker, including the attempt to induce new industries into areas of decaying industry which may not be at all well suited for new industry. Most of the virile workers in such areas will have already migrated to other areas where employment is to be found, but the older remnant has strong local ties and are likely to demand local reconstruction and revival. They may well be capable of exerting strong political pressure.

Policy with reference to full employment is bound up with policy in connection with population, because whatever may be the over-all national trends, population moves with opportunities for employment and therefore if work cannot in all cases be brought to the worker, our planning will have to provide for migration.

Among the factors to be considered are immigration and emigration . . . from 1871 to 1931 the balance of migration was outward, whereas since 1930 it had been inward.

Apart from anything else we cannot, at least on our present diet, grow enough food at home to support anything like our existing population. The Commonwealth is a family centred on Great Britain, "This precious stone set in the silver sea." It would surely be more acceptable to the other members of the family that we should keep bright that jewel, rather than lay more of it waste in order to find work for and maintain a much larger population than the fruits of our soil can feed.

1. *Manufacturing industries.*—The Board of Trade now has a potent voice in town and country planning since Section 14 (4) of the 1947 Act requires a local planning authority to obtain a certificate from the Board of Trade before it permits the erection of an industrial building exceeding 5,000

square feet in floor area. The Board has to certify that the erection of the proposed industrial building is consistent with the proper distribution of industry. But has the Board a policy with reference to such distribution, and if so, how is it related to the right use of the land of the country as a whole? The latter being the concern of the Minister of Local Government and Planning. So far as one is able to judge, the Board is at present so obsessed with (a) bolstering up the development areas, (b) export, that it fails to see the picture of the country as a whole.

If this apparent obsession persists it is bound to defeat the recommendations of the Barlow Commission with reference to decentralization (particularly from Greater London) and distribution, on social, economic and strategic grounds. On the one hand, it will hamstring small progressive country towns which with advantage could take more industry, and even New Towns which are part of Government policy but will be of no avail unless provided with industry; on the other hand, if every manufacturer of goods for export who prefers the amenities of our capital city is given way to, the decentralization policies of the County of London and Greater London Plans will be brought to naught.

2. *Agriculture.*—This is, I believe, still the greatest single provider of employment in this country. Agriculture is, however, the primary land user and is the loser whenever land is taken for other purposes. Professor Dudley Stamp stated that the official target (presumably a combined effort of the Ministries of Agriculture and Food) for home-produced food was 55 per cent. of our total consumption. He also made clear that it would be difficult to reach that target on the present area devoted to agriculture and that, therefore, any further encroachments on that area would be dangerous. He then went on to mention some of the other main claimants for more of our limited supply of land, such as housing, industry, roads, defence services. These claims were further scrutinized by Mr. G. P. Wiberley when he estimated that by 1970, 15 per cent. of the land area of England and Wales would be occupied by uses other than agriculture, as compared with 11 per cent. in 1939. According to Professor Dudley Stamp, we managed to produce 50 per cent. of our food during the war, despite widespread defence activities.

I do not propose to comment on these statements, but obviously they involve important national policy decisions with reference to the use of land, for example: (a) Must our development plans be designed on the assumption

that this country is and will remain in a state of siege? If so, we may have to sacrifice some amenity and good living for food. Also large areas will be required permanently for battle training and works related to defence. (b) Is any acceptable and healthful change of diet possible that would enable us to feed ourselves with food grown on our present agricultural acreage? (c) Is a more equitable distribution of population within the Commonwealth possible? If so, we can relieve the pressure on the homeland and may not have to lay so much of it waste by industry for export.

The Ministry of Agriculture has a definite policy and is reluctant to allow any more land to be taken out of cultivation for other purposes. It even suggests that urban densities should be increased in order that agricultural land should be saved. . . . It is my belief that the sound way to effect economies in the amount of land required for urban uses is by skilful planning, free from any element of straggle or sprawl; not by raising densities above those, for example, enunciated by the Study Group of the Ministry of Town and Country Planning in their contribution to the Report of the Dudley Committee.

3. *Forestry.*—Forestry is not a great employer of labour but the policy of the Forestry Commission to plant 5 million acres in all in Great Britain indicates that it is a big land-user. By and large, forestry is not a factor that affects urban settlement, but there is some competition between it and up-land farming, it may be affected by mineral extraction, and its relationship to National Parks and Nature Reserves calls for careful planning.

4. *Minerals.*—The winning and processing of minerals is a major source of employment and the basis of many other industries, including many on whose products we rely for the export trade by which we live. It is therefore of fundamental importance, although by its nature a wasting asset, and unfortunately the extraction of minerals and the disposal of mineral waste devastate considerable areas of land.

The Coal Board has produced a national programme, which will involve some shifts of population, e.g., from West to East Scotland, and since the extraction of coal, because, *inter alia*, of its pit heaps and the subsidence it causes, produce acute problems in land use, it is obvious that national coal planning by the Coal Board and surface planning by the local planning authorities will need most careful co-ordination.

Other minerals are dealt with in *The Control of Mineral Working* issued by the Ministry of Town and Country Planning, in January this year, just prior to its change of name.

The following quotation indicates the desire of the Ministry to co-ordinate the policies of the various Government Departments concerned, the various branches of the minerals industry and the local planning authorities:

"The Ministry of Town and Country Planning, in consultation with the Government Departments con-

cerned with the production of particular minerals, is accordingly arranging with the various branches of the minerals industry for much of the necessary information to be compiled centrally. When it is available, regional discussions will normally be arranged between representatives of the local planning authorities, the Ministry of Town and Country Planning, the Ministry of Agriculture and Fisheries, the appropriate Production Department, and the Industry, to examine the problems involved, and, if possible, reach agreement on their solution."

5. *Transport.*—Transport is a big employer of labour but as planners we are mainly concerned in the routes of its roads and railways, its aerodromes and ports. These must obviously provide an integrated national framework of communications and equally obviously it must be linked up with and serve the localities. Much of land transport has been nationalised and the Ministry of Transport is now responsible for over 8,300 miles of trunk roads and has projected a number of national routes, some of which we hope will be motor-ways. No extension of main railway lines seems probable, and the very necessary improvement of road access to some docks is mainly a matter of local planning. A system of national, regional and local airfields must be devised not only because of its intrinsic importance but also because of the considerable areas affected by the air approaches which must be kept clear of obstructions.

6. *The Tourist Industry.*—This deserves mention not only as a considerable source of employment but also because any recession of our export industries would increase its value as a dollar earner. Apart from the improvement of our hotels and the relaxation of our archaic licensing laws, matters outside the province of the town planner, the encouragement of the industry involves a good deal of cleaning up in addition to the careful preservation of our remaining treasures of historic buildings, country towns and villages and landscape.

The Regional Offices of Government Departments.—These are not major sources of employment but I place them in the list because they are an instance of the repercussions of national upon local policy. The authors of the Cambridge plan request all Departments to limit severely their own offers of additional jobs in the Cambridge district and point out that in Cambridge the process has already begun of firms which have much to do with the regional offices of Government Departments establishing offices in the town.

Defence and National Parks

Other matters of national policy which notably affect land use but which hardly affect employment problems related to town and country planning, are Civil Defence, Military Defence, and National Parks.

Civil Defence.—This again raises the question as to whether we are to plan

on the assumption that we are and shall continue to be in a state of siege.

Civil Defence is, however, unhappily a necessity at the present time, and the town planner can take it into account in the following ways: with reference to underground defence, he will have to bear in mind the location of quickly accessible, carefully spaced and easily found shelters in residential, commercial and industrial areas. The ways to them must be wide enough to allow ready access but not so wide as to raise the danger of congestion.

Overground, the present policy of reconstruction and thinning out of congested areas and dispersal of population and industry into smaller units, including New Towns, coincides with the policy of Civil Defence and new congestion must not be allowed to take place.

Military Defence.—During the second World War, 11,547,000 acres (or about 20.5%) of the land of Great Britain were held or used by the Services for training purposes. Over 10 million acres have since been released and the requirements for all Service purposes, in 1947, was 1,027,200 acres, or 1.83%, of which some 40% already belonged to the Services. On 10th March, 1950 the Parliamentary Secretary to the Ministry of Agriculture stated that the Service Departments then held 817,000 acres in Great Britain (1.45%), of which 286,000 were let to farmers and nearly 100,000 acres to County Agricultural Committees.

The fact that some of the land required for training purposes overlaps areas recommended for National Parks and that many military airfields encroach upon good agricultural land is much to be regretted, but national defence is of paramount importance. Careful planning can, however, secure adjustments between these rival land uses and it is but another example of the importance of the Minister of Planning as an adjuster of national policies which affect land use.

National Parks.—The National Parks Committee recommended the creation of twelve National Parks, with a total acreage amounting to nearly ten per cent. of the area of England and Wales, and lying within twenty-five counties, plus Conservation Areas totalling another seventeen per cent. I feel sure that we all wish the National Parks Commission the best of luck in the contribution they are making towards the realization of this national policy. It in no sense involves sterilizing twenty-seven per cent. of our land, but it should establish a priority for amenity over that area, when the claims of land-users are under consideration. A priority which, as regards National Park Areas, has, as previously noted, already come second best in relation to some battle-training areas, has also had to give way to intensified cement making in the Peak District and is in jeopardy with reference to hydro-electric projects in Snowdonia.

National Action

Some of the items I have listed involve plans on a national scale, but this



when the joinery is by

**BOULTON
AND PAUL**
IT'S A FIRST CLASS JOB

With up-to-date machinery we produce efficiently and therefore at keen prices. Skilled men guide our machines with the same care as a craftsman handles his tools, thus assuring our reputation for fine quality. Send us your problems; we shall be pleased to quote and advise.

NORWICH • LONDON • BIRMINGHAM

Furniture for Special Needs

Certain places, like canteens, restaurants, hotels and board-rooms need special furniture. In such cases Heal's are happy to carry out complete furnishing or decorating schemes. They can either work to the architect's own plans, which they will interpret as sympathetically as possible, or they can design and produce their own furnishing and decorating schemes. In either case Heal's will be glad to place the service of their specialised designers at your disposal, and will interpret your ideas with complete understanding.

HEAL'S CONTRACTS LTD.

196 TOTTENHAM COURT ROAD, W.1. TELEPHONE: MUSEUM 1666. TELEGRAMS: FOURPOSTER, RATH, LONDON



Part of the works canteen recently furnished by Heal's Contracts Ltd., for Messrs. John Mackintosh & Sons Ltd., Caley Branch, Norwich. The metal stacking chairs are painted green and the table tops are buff coloured "Formica". The curtains are of green woven linen.

**Please write for our folder "Furniture for Special Needs"*

CONSTRUCTIONAL ENGINEERS STEEL FRAMED BUILDING SPECIALISTS

WAREHOUSES
GARAGES
GANTRIES
BUNKERS
CONVEYORS
—
CUTTERS
ETC.



GIRDERS
PLATEWORK
—
WELDED
RIVETED
OR
BOLTED
CON-
STRUCTION

WALKER BROTHERS, LIMITED

VICTORIA IRONWORKS

WALSALL

ENGLAND

Telegrams: WALKERS, WALSALL.

London Office: 66 Victoria Street, S.W.1

Telephone: WALSALL 3136, 3137, 3138, 3139.

Telephone: Victoria 6049

paper is only intended to deal with policy and the duty of the Minister of Local Government and Planning does not go beyond "securing consistency and continuity in the framing and execution of a national policy with respect to the use and development of land"—in itself a terrific job since the examples I have quoted make manifest that the framing and execution of such a policy involves the co-ordination of many national policies, some of which have yet to be framed.

In applying national policy to the land, full weight must be given to local conditions, circumstances and aspirations. It is not therefore intended that a national plan of land use should be designed and imposed from above. On the contrary, such a plan will in the main be built up from local and regional plans, and this I believe to be right, although it is high time that the gaps in regional planning should be filled up.

On the other hand the Ministry is providing a most useful background for local and regional planners, with its National Atlas and memoranda. We all hope that the Research Section of the Ministry will be fully maintained and, in addition, look forward to this year's census for more essential information on a national scale.

Local Policy

In my experience, it is only in comparatively recent years that local authorities have begun to appreciate that the function or functions the places they are in charge of are best fitted to perform should be a dominant factor in the planning of those places. It demands policy decisions based on a thorough understanding, through survey and diagnosis, of past, present and prospective conditions, circumstances and prospects, regional and national trends and policies.

Regional and national policies must be taken fully into account but unless the aims of local policy have been thought out, the local authority cannot make any intelligent contribution to the framing of national policy, and will simply have to accept the destiny allotted to it by others. Local aims will have to be brought into harmony with national and regional or county policy, but at least they should be formulated and expressed.

An excellent example of the need for a policy decision on functions is presented by the Cambridge Plan. As the authors point out, "up to 1860 Cambridge was a university and market town and a rail centre . . . Up to 1921 the growth of the University was largely responsible for the growth of Cambridge." They then go on to describe recent industrial developments, the additions due to its being made a regional centre of Central Government, and the attractions that the place has for residence and industry. After considering all these matters they come to the conclusion that any fresh growth would both hinder the work of the University and make the town* a much less pleasant place in which to live and work.

* Now the City.

Cambridge Town Council is not a planning authority and therefore this is an interesting example of the need for co-ordination between local policy and county policy, full weight being given to the fact that the County Council, as the local planning authority, is in direct contact with the national planning authority and is equipped with a competent planning staff. Also in this case both county and town have the great advantage of a Plan prepared by an eminent consultant and colleague.

The Co-ordination of National and Local Policies

Employment.—The Barlow Commission was wholeheartedly in favour of decentralisation or dispersal of industries and industrial population from congested urban areas, and one of their unanimous recommendations, as a means of achieving it, was that existing small towns should be extended. I personally know of several small towns that could with advantage be so extended and where the local authority is eager to play its part and to which industries would have been glad to come, but so far their ardour has been checked from above merely because they have not in the past suffered seriously from unemployment. In my submission this is not only the yardstick which should be applied. Within limits, local enterprise and enthusiasm should be taken into account.

The paper recently presented to the Royal Institution of Chartered Surveyors by Mr. E. H. Doubleday, County Planning Officer, Hertfordshire, is discouraging with reference to liaison between Government Departments and local planning authorities. He says, "As yet, there is no connecting link between the Government Departments concerned with the distribution of industry on a national scale, the local planning authority concerned with the selection and siting of industry in its area, and the developing authorities also concerned with these issues and with the provision of industry to employ incoming population."

Minerals.—Local policy as to the function of a place may be profoundly affected by mineral deposits. They may be the mainstay of local employment or they might impair the assets of amenity of a residential town or health resort, unless both the winning and processing of the mineral are most carefully planned. Also there must be careful timing of underground and surface development in places where the latter can take place after minerals have been extracted and the surface has settled down.

Transport.—Any national system of roads must be principally concerned with linking up main centres of traffic and with strategic considerations. Unimpeded and safe flow at high speed is the principal objective. Consequently, points of access must be reduced to a minimum and such junctions should be of the clover-leaf or equivalent type, and these are costly to provide. Since such junctions must be key points in local planning, their precise location is

obviously a matter in which the local planning authority has a deep interest. Also, since the purpose of main through routes would be defeated were frontage development allowed, they will sharply divide the areas they traverse and this presents a pretty problem for local planners who also have a keen interest in possible modifications of alignment in the interest of amenity and local arrangements.

The recently published report of the Inter-Departmental Committee appointed by the Minister of Civil Aviation (M.C.A.P.92., H.M.S.O.) indicates that the helicopter is likely to become an important medium of transport in this country since it is particularly well suited for distances between 50 and 300 miles.

The Tourist Industry

The tourist industry is largely dependent upon amenity and it is worth noting that local policy may be sounder than national policy in such a matter, witness the controversies over the Westminster Hospital site and Carlton House Terrace, and local resistance to the incursions of defence services into areas of great beauty attractive to the ramblers and the tourist. There should at least be a local policy capable of expression when national policy is declared, and such local policy must be taken into account before a balanced decision is arrived at.

National Parks.—It will probably be generally agreed that as such parks are national, both national and park considerations must prevail. Nevertheless, on the national scale, consideration has to be given to the claims of mineral working and of the defence services. At the local level some adjustments of boundaries may be justifiable. Local authorities may also have views as to management and control, and have every right to express them.

Conclusion

There are hardly any subjects with which Central and Local Government are concerned that do not affect the use of land. A point I have tried to make is that those who frame policies on such subjects should realize that they will be applied to land of widely varying characteristics and present uses. Ours is still a fair land but it is limited in quantity and almost all of it that can be used is already in use. Consequently, if conflict and waste are to be avoided, there must be a careful adjustment of policies. In this adjustment, local considerations must be given due weight and, to ensure this, local authorities must be ready with their own policies.

As I see it, the main function of the members of our profession is to design plans, based on survey and diagnosis, that will enable both national and local policies to be applied to the development of land and conservation of land resources, in a manner which will further the convenience, health, happiness, efficiency and visual satisfaction of those living and working upon it. It surely follows that the framers of these policies will be well advised to consult us as they proceed.

News of the BUILDING INDUSTRY INTEREST

PLASTICS of all descriptions will be shown at the British Plastics Exhibition to be held from June 6-16 at Olympia. Side by side with the exhibition, will be a convention at which prominent speakers will discuss contemporary applications of plastics.

So far as building is concerned there has been, in recent years, considerable advance in the use of plastics. Undoubtedly there is still a feeling in some architectural quarters that plastics are not yet perfect. Criticism will be put forward in a paper to be read by Gontran Goulden, T.D., A.R.I.B.A., at 2.30 p.m. on June 11, and Mr. H. H. Lusty, A.M.I.E.S., will explain what the plastics industry can and does offer to the building industry.

This session will provide an opportunity for open discussion of the problems facing the industry in using plastics for building.

There is no charge for admission to the convention sessions. Tickets to secure a seat may be obtained from British Plastics, Dorset House, Stamford Street, London, S.E.1.

ASBESTOS—raw, fibre and waste and asphalt and bitumen are added to the list of goods freely importable from all, including hard currency, countries from March 28.

Red cedar shingles, manganese ore and refractory or heat insulating bricks and blocks are also on the list published by the Board of Trade.

A FALL OF ELEVEN FEET on to a concrete floor resulted in a Hull bricklayer being awarded £15,000 damages against his former employers. The accident occurred when the bricklayer was pointing a factory wall. Mr. Justice Wallington ruled that the defence of contributory negligence had no place.

THE BOARD OF TRADE announce that the President has appointed Sir Colin S. Anderson to be a member of the Council of Industrial Design. Sir Colin is a Director of Anderson, Green & Co. Ltd., shipowners. He is Chairman of the Royal College of Arts, President of the Design and Industries Association, a member of the Arts Panel of the Arts Council, a member of the Council of the Institute of Naval Architects, and was President of the Chamber of Shipping for the year ended February 1950.

THE PLANT HIRE RATES Committee of the M.O.W. have recommended a schedule

of rates for net cost and similar items in connection with the hire of contractors' plant.

Paragraph 1 (b) of Part II of the Schedule to the Control of Rates of Hire of Plants Order 1950 (S.I. 1950, No. 2060) states that the cost of fuel, lubricating oils, grease and drivers or operators provided by the letter on hire shall be charged at net cost or at an agreed estimate of net cost and that charges for the wire ropes to be paid for as consumable stores shall also be at net cost or at an agreed estimate of net cost.

Where it is desired to arrive at such an agreed estimate the figures given by the M.O.W. are considered to be fair charges; they do not cover fuel or subsistence allowance paid to the driver or operator. The rates have no Statutory Authority and their use should be a matter of prior arrangement between the parties concerned.

THORN ELECTRICAL INDUSTRIES LIMITED have been awarded the Term Contract for the supply of fluorescent lighting fittings to all R.A.F. stations and Air Ministry establishments at home and overseas.

AT WANDSWORTH COUNTY COURT Messrs. Douglas Bros. (Builders) Ltd., of Wilcox Road, S.W.8, recently sought to recover from Mr. E. R. Mellor the sum of £15 15s. for services rendered in estimating and measuring for work to be carried out in the conversion into three flats of Woodmansterne, Putney Heath, S.W.15, on the grounds that their tender being the lowest should have been accepted.

The plaintiffs alleged that they had advised the defendant on the previous tenders received and on the items of the specification which could be eliminated in order to reduce the cost of the works and that they had prepared a revised specification upon which they had estimated.

Mr. Batten, the manager of the plaintiffs, in evidence, alleged that there was an agreement that if they could reduce the costs within certain limits they would receive the contract and that although they had tendered below this limit their tender had not been accepted. In cross-examination he persisted that the original claim for waste of time in estimating had not been abandoned and that in addition the claim covered advice on the previous tenders and revisions in the specification.

The defendant stated he had not sought the advice, nor would he have accepted advice

from the plaintiffs, that he gave instructions only, and that he himself had revised the architect's specification which had contained works of repair and items unnecessarily increasing the amount for which a building licence was to be applied for. The defendant further stated that he had accepted a higher tender after careful consideration of quality of workmanship and other matters.

Judge Hodgson, giving judgment, stated that he was unable to accept the evidence given on behalf of the plaintiffs. In the result, the plaintiffs' claim, whether for loss of time in estimating, or for alleged advice, or for loss of profit on an alleged breach of contract wholly failed and judgment must be entered for the defendant with costs on fixed scale.

OVERSEAS BUYERS are being organised into special parties to visit the British Industries Fair at Earls Court and Olympia in London and at Castle Bromwich, Birmingham, from April 30 to May 11.

Buyer delegations are expected from Hong Kong and Palestine and notifications have also been received of proposed parties from Brazil, Norway and Switzerland.

The Hong Kong delegation will be led by Mr. U. Tat Chee, vice-chairman of the Chinese Manufacturers' Union. His 1951 mission will be the largest yet.

This year's trip is an effort to regain the commercial and industrial prosperity of Hong Kong which is said to be endangered by current political difficulties.

A B.I.F. party of between 30 and 40 Arab business men from Palestine is being organised by Mr. Hanna Nazzari, director of the General Manufacturing Company of Jerusalem, whose party should arrive at the Fair on or about May 1.

THE ASSOCIATION OF BUILDING TECHNICIANS is to hold its Diploma Examination for Clerks of Works in London and Glasgow on Thursday, Friday and Saturday, May 17, 18, 19. Other centres will be arranged according to demand.

The examination is being held later than on previous occasions because of the early Easter vacation and also to enable provincial candidates travelling to London to visit the Festival of Britain.

Copies of the syllabus and application forms and previous examination papers may be obtained from the General Secretary, Association of Building Technicians, 5 Ashley Place, London, S.W.1.

MESSRS. JOHN LAWRENCE (GLASGOW) Ltd., of West Regent Street, Glasgow, have received approval from the Dean of Guild for a 326-house scheme at Broomhill and Balshagray, Glasgow. These houses will be for sale and are the first of the type to be built in the city since the war. The scheme involves varied units from semi-detached to four, six, eight and ten houses per block. Garages and lockups are being provided. The firm anticipates that the first of these houses will be erected by the end of the year. Cost will be from £1,550 to £1,670.

GLASGOW CORPORATION is planning to go ahead with the schemes for deep shelters-cum-car parks at Blythswood Square and Balmoral Street. The various committees interested have passed the proposal to the Civil Defence Committee asking their approval and seeking a grant on the basis that these shelters will form part of the Civil Defence programme of the city. When not required as shelters they will be used as car parks.



HONOURS FOR CRAFTSMANSHIP

Mr. R. R. Stokes, M.C., Minister of Works, presented British Empire Medals recently to three craftsmen for long and good service. They were to Joseph Graham (aged 64) who did a great deal of the wood carving in the new House of Commons, Andrew Shearer (72) who was foreman mason fitter for the new House, and Walter Smith, principal storekeeper at the Ministry, who has had 39 years' service. Above, left to right, are Mr. Graham, the Minister of Works, Mr. Smith and Mr. Shearer.

GOOD, BAD OR INDIFFERENT?

No. 30—By A. FOREMAN

Kitchen Fittings.

THE days of the old open-dresser and a sink without draining boards as the only fittings in a kitchen, have gone, and slowly we are equipping our kitchens properly as a means of helping the over-worked housewife. It is desirable that as soon as possible all storage in kitchens should take the form of cupboards and drawers. I am often asked at what height the working levels, such as the tops of dwarf cupboards and draining-boards, should be made in order to meet the needs of the unknown householder whose size must of necessity be very variable. Undoubtedly much compromise is needed as it is quite impossible to provide correct heights in a small kitchen such as most houses or flats have to-day to suit every major operation.

Some years ago B.S.1195 for built-in kitchen fittings was prepared and in this the working level of 3 ft. was set out for all built-in fittings; this was undoubtedly a compromise and it seems likely that the decision was taken to meet the desire for one continuous level for the working surfaces right round the room and also to reduce junctions between units to a minimum by providing continuous tops over a series of separate units. The minimum of joints in working tops is very desirable as cracks can easily become unhygienic.

I have always felt that 3 ft. is rather high for most people to do many operations in the kitchen although it is the desirable height for draining-boards and sinks since it puts the inside bottom of the sink at about 2 ft. 3 in. above the floor. Unnecessarily low heights are equally unsatisfactory as they involve stooping, which is extremely tiring. It should be borne in mind that the average householder does not perform any one operation in the kitchen for any great length of time and it is likely that the time spent at the sink is considerably greater than any other operation.

In recent years I have been told that, abroad, research has been carried out to try and arrive at what are proper heights. I have not heard of any authoritative similar study in this country. Last summer I noticed in Scandinavia that as the result of research it seems that two heights are being adopted, namely 3 ft. for sinks and the associated draining-boards and about 2 ft. 10 in. for all other surfaces including the cooker tops. I also saw a slide-out working surface at about 2 ft. 3 in. above the floor for use when sitting on a normal chair to cut up or mix food.

I have come to the conclusion that it would probably be wise to adopt the two height scheme in this country, based on 3 ft. for sink units and 2 ft. 10 in. for the other fittings, as being likely to provide more comfortable conditions.

A matter in relation to heights of equipment which I hear criticized very often is the height of gas and electric cooker tops. Heights of 3 ft. and more are certainly too great for comfort when stirring in a large saucepan. I feel sure that the working top level could be reduced to 2 ft. 10 in. without making the oven top too small or placing it too near the floor; high level ovens at the side of boiling tops are much to be preferred; the space in the normal

kitchen as we now have seldom permits sufficient space for their use.

I notice that sliding doors are often used on cupboards in kitchens, sometimes of metal or wood and sometimes of glass. I appreciate that these have advantages but there are also disadvantages: firstly, sliding doors are the cause of many damaged fingers and, secondly, they run on tracks or in grooves which make the cleaning of bottom shelves more difficult. I think it is best to avoid glass fronts as the contents of few storage cupboards can be kept presentable.

I find that most metal fittings are very noisy and, on the whole, seem to stand up to usage less well than the wooden ones, but the construction of the latter needs to be good, especially in regard to doors of which one sees far too many which have warped or twisted because the construction is poor; if the methods of door construction given in B.S.1195 are followed and proper care is taken there should be little trouble from defective doors.

This brings me to the matter of hardware, which is often really dreadful not only in regard to quality but also as to type. Again the hinges and handles suggested in B.S.1195 seem worth following, particularly the "D" type handle which is of a decent size and has a sound method of

fixing which does not leave shanks of bolts and nuts projecting.

I much prefer kitchen units which have their own backs as these not only strengthen the construction of the units but also make for increased cleanliness. When backs are used the plaster behind may be omitted and in any case plaster is not a very good material for use inside cupboards while it is also difficult to make a good junction between the cupboard and the wall. A small but important point in connection with installation is that on several occasions I have seen attempts made to bring on to jobs sets of cupboards the full height of the rooms in which they are to be fixed and then it has been found impossible to "up end" them. Always make the upper cupboards separately and join them together on the job and even then keep them at least 1 in. short of the ceiling and put a cover fillet over the space. It is as well to take cupboards to the ceiling although they are only useful for "dead storage" as it is a good way of eliminating dust on the tops of the fittings.

One last point, try and ensure that the walls behind fittings are reasonably well dried out before installation of the units especially wooden ones, which in any case it is wise to treat with bitumastic paint on the faces against solid walls or partitions.

THE PRINCIPLES OF STRUCTURAL WELDING

No. 5 — By Rolt Hammond, A.C.G.I., A.M.I.C.E.

STUD WELDING

THE use of portable stud welding equipment can be employed with great advantage in the building and construction fields for various erection and assembly applications. This process requires a direct current supply for which a direct current welding generator with drooping characteristics or of the constant voltage type is suitable. The voltage should be between 60 and 100 volts, the current taken depending upon the diameter of the stud being welded to the plate, a brass stud of $\frac{1}{4}$ in. diameter requiring 200 amps, whilst a stud with diameter of $\frac{1}{2}$ in. required 400 amps.

In stud welding, the stud is brought into contact with the plate which is cleaned and prepared for the operation; the stud being

connected to the positive side of the supply and the plate to the negative pole. When the stud is pulled away from the plate, an arc is formed which raises the temperature of both brass stud and steel plate. After a predetermined interval of time, which is provided by automatic means, the stud is pushed home, the current is broken and the operation is complete and also completely automatic. The method can be employed for welding steel studs on steel plate and excellent results have been achieved with studs of at least $\frac{1}{4}$ in. diameter. Experience has proved that studs can be welded on to steel plate under water, which may be a great advantage in certain types of building and constructional work.

Stud welding has now been developed to a high pitch of efficiency in this country. (continued on page 405)

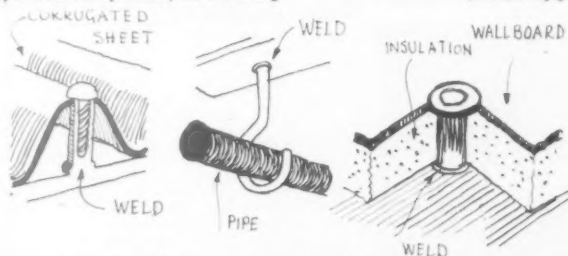
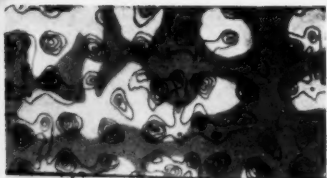


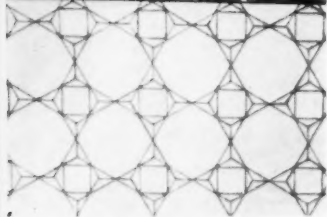
Fig. 6. Three of the numerous possible methods of using stud welding.



FINISHES PLASTICS, ETC.

D5.1

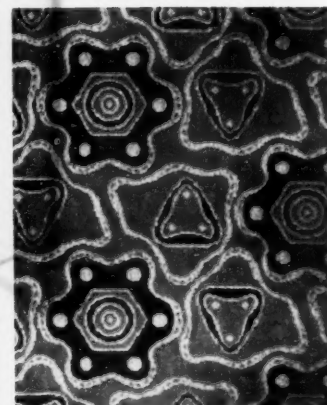
Two applications of crystal structure diagrams to building material are shown in this illustration of patterns incorporated in plastic sheet. The designs by Marcin Rowlands were derived from the crystal structure diagrams of Apophyllite and Aftwillite. A pattern derived from Hydrargillite has been used by the same designer in a table top.



FINISHES WALLPAPER

D4.1

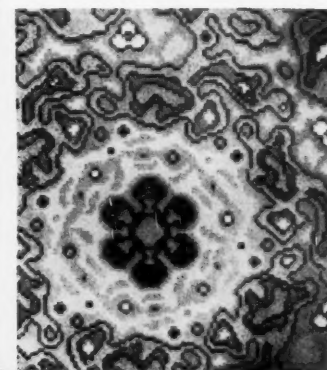
Designed by Robert Sevant using the crystal structure diagram of Insulin, this wallpaper pattern compared with the carpet pattern below shows that the same original diagram allows the designer considerable flexibility of interpretation.



FINISHES TEXTILES

D3.1

Insulin provides the basic crystal structure diagram for this carpet design the pattern repeat being 8j in. 10j in. This pattern may be compared with the wallpaper, above, and the linoleum, below. All three are derived from the Insulin diagram.



FINISHES PLASTICS, ETC.

D5.2

A design for linoleum by E. H. Tee. The pattern repeat is 18 in. 3 ft. The names of manufacturers who have co-operated in marketing these designs will be given on application. Some are contained in the list given on this page.

MOSAICS

The names and addresses of manufacturers of any item illustrated in MOSAICS, together with more detailed information relating to their products—including price and availability—will be forwarded to readers on request.

Letters should quote the serial number and be addressed to :

The Associate Editor,
The Architect and Building News,
Dorset House,
Stamford Street, S.E.1.

Please mark the envelope MOSAICS.

FESTIVAL PATTERN GROUP

Twenty-six leading British manufacturers have been working together at the invitation of the Council of Industrial Design for some eighteen months upon a programme of design development in connection with the Festival of Britain. Four examples of the results of this work are published alongside, and will be seen at the Festival exhibition.

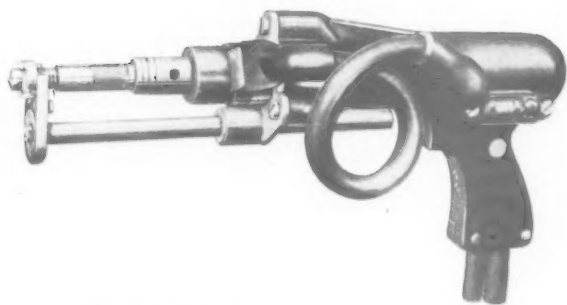
The products illustrated are all decorated with patterns derived from crystal structure diagrams—the maps drawn by scientists to record the arrangement of the atom in particular materials. A crystal structure diagram takes the form of a repeating symmetrical pattern.

The patterns vary in character according to the different materials examined, or the different features in a particular material brought out in the diagram or the difference in plane at which the cross-section has been taken.

Industrial designers have adapted the diagrams to their own media. These crystal structure diagrams have the discipline of exact repetitive symmetry, and are full of rich variety which may do much to replace hackneyed traditional patterns.

Of the twenty-six manufacturers who have co-operated in this scheme the following have close connections with architecture and building:—

Messrs. Carter & Co., Ltd., Chance Bros. Ltd., the Dunlop Rubber Co. Ltd., the General Electric Co. Ltd., G. A. Harvey & Co. (London) Ltd., I.C.I. Ltd., Leathercloth division, Waverite Ltd., and John Line & Sons Ltd. The centre for the display of these patterns at the Festival will be the Regatta restaurant at the South Bank, which was designed by Mr. Mischa Black.



(continued from page 403)

Welded studs of both standard and special types are now being used to supersede conventional methods of fixing walling, roofing, pipes, cables and heat insulation, to mention only a few examples common in building construction.

Lines and pipes can be supported with hook studs. This eliminates drilling and manual welding. A third example of fixing is the use of welded studs for securing asbestos-cement boards and insulation. In this case hollow female studs and drive screws with 1-inch diameter flat head washers are used; holes of $\frac{1}{2}$ inch diameter are first drilled in the asbestos-cement sheeting at the required centres, the board is then held in position and the studs are welded through the holes. In this case, after welding the ceramic ferrules are left in the holes. Drive screws are then hammered into each stud securing the material.

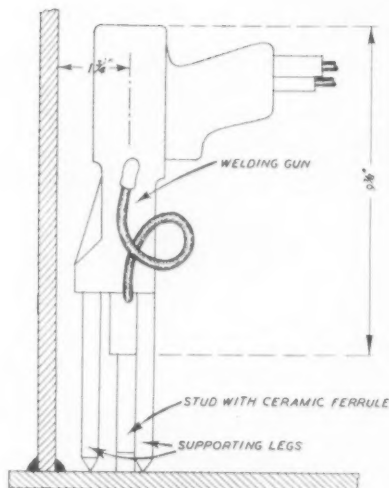
At the present stage of development, automatic stud welding can be used for attaching a variety of components to structures by employing special fixtures and jigs that will enable the gun to operate in the most convenient and efficient manner possible. Stud welding saves time and it is claimed that as many as 14 studs can be welded on to steel plate in the time taken to fit one by drilling and tapping. Moreover, simplified design results from adopting stud welding. Appearance and economy of construction are two further important points in favour of stud welding.

The weld between the stud and the base metal is gas, oil and water-tight, and additional mechanical strength is obtained by not perforating the plate. A gun (Fig. 7) has been designed for welding studs ranging in diameter from $\frac{1}{8}$ inch to $\frac{1}{2}$ inch at the rate of from 150 to 300 an hour, according to the size of the stud and the purpose for which it is used.

For large scale quantity production the gun may be used either as a hand tool, or it can be mounted in a fixture for repetition work, a number of guns being mounted together for multiple stud welding. The welding supply varies from 60 to 90 volts direct current and this can be obtained from a recently developed metal rectifier. Alternatively the current can be obtained from an ordinary welding generator, or even from battery units if no power supply is readily available. The supply leads for the welding current can be up to 200 feet long without affecting the operation of the gun. A separate timing control unit is housed in a portable case and is connected in the circuit for automatic control of the welding cycle.

In operation, the stud is held in a chuck at the base of the gun and a ceramic ferrule is placed over the free end and retained by a special holder. The end of the stud is then positioned on the base metal and pressed down against a spring

Fig. 7. Above, a photograph of a stud welding gun and right, a drawing showing the attachment of supporting legs to ensure right angled fixing of the stud. Fig. 8.



to make contact, the contact surface being cleaned by a small current flowing through it which burns away scale and dirt. Positive indication of good contact is given by a robust pilot lamp fitted to the pistol grip of the gun. This is particularly valuable for "blind" welding where the stud is being located through a hole, when the gun cannot be positioned visually.

After having correctly positioned the gun, all the operator has to do is to hold it still and press the trigger. This action closes the main contactor and allows the full current to flow the stud being at the same time lifted and the arc struck. The arc is extinguished after a predetermined interval by a relay in the timer opening the main contactor. Welding is therefore completely controlled by the timer. It is therefore impossible for the weld time selected for a particular job to vary. If the trigger is pressed inadvertently during the welding operation, the timing mechanism will not begin a second sequence. Thus the operator cannot interfere with the welding cycle.

CONCLUSION

It is of the utmost importance that all components to be joined by welding shall be accurately fitted together to a higher degree than is generally considered necessary with riveted work. Furthermore, in order to gain the maximum possible advantage from welded construction, the quantity of weld metal deposited should be the least possible consistent with the provision of necessary strength. It is wasteful to employ added weld metal for making good deficiencies arising from badly assembled plate work. The addition of more weld metal than is necessary for strength at the joint will often cause locked-in stresses which can bring about very undesirable stress concentrations.

The use of accurate machines for the oxygen-cutting of plates to fine limits of accuracy is an important contributory factor in ensuring well fitting assemblies. With the equipment now available, a clean edge is left, accurately trimmed and ready for welding; oxygen-cutting machines are obtainable which can cut a flat root and two bevels on the edge of a plate at the same

time with three cutting nozzles. This is a great advantage for butt welding of thick plates. The objection is sometimes raised against oxygen cutting that a heat-affected zone is left on the plate after cutting, but experience has proved that the depth of this is more than masked by the heat put into the plate when the welding operation takes place. The outstanding advantage which oxygen-cutting has over shearing and planing is that considerable time and labour will be saved because material will not have to be diverted to the planing and shearing machines.

Careful consideration should be given to problems of distortion when bevelled plate edges are employed for welding, because where the material is comparatively thick it is desirable to employ a double vee butt joint, even if this will result in more overhead welding than is required for a normal sealing run. Generally speaking it is found in practice that less distortion results from employing a high welding current than by employing a large number of runs of light gauge electrodes. Also, less distortion is produced by intermittent than by continuous welding. Where a structural member is welded from one side only, a back sealing run is necessary wherever possible and the design of the joint should allow for this. Indeed, the British Standards Institution have declared that where a sealing run cannot be applied the effective strength of the joint is reduced by a half.

Finally, it is necessary to stress the importance of designing a welded structure in such a manner that the sequence of welding avoids, as far as possible, an accumulation of locked-up stress. Arrangements should be made for as much down-hand welding as possible to be done in building the structure. The number of components should be limited to the minimum. Plates should be employed rather than rolled sections, and any welding in a confined space should be avoided by suitable design. Castings should be eliminated as far as possible. The production of a successful welded structure depends ultimately upon effective supervision and correct welding current, the latter having become increasingly important with the present tendency towards the employment of large gauge electrodes which provide deep penetration of the weld.

QUANTITY SURVEYOR, ARCHITECT, CONTRACTOR AND CLIENT

Extracts from a paper on "The Relationships between the Quantity Surveyor and Architect, Contractor and Client" read by H. A. Ackland, O.B.E., F.R.I.C.S. at the Royal Institution of Chartered Surveyors General Meeting on March 14.

I have been asked to treat this subject in a somewhat lighter vein than is customary, and I am particularly pleased to do so as I believe that, whilst we quantity surveyors certainly cannot do our work in a flippant manner, we must retain some sense of humour to keep our sanity.

It should be made clear at the outset that the views I express are my own and do not necessarily reflect those of the Quantity Surveyors Committee.

Architects, contractors and quantity surveyors alike have all recently been the subject of exhortation, admonition, advice and dictation from all directions. We have had the reports of Working Parties, Productivity Teams, articles in technical journals and other dissertations, and out of this welter there has certainly come some good. The cardinal need appears to be better understanding of the "other fellow's" problems. To get this we must first understand his functions. We must not try to perform them for him, but to dovetail our own into the whole pattern. Any advance in the efficiency of building contracting system depends on our good relations one with another.

First I would like to discuss our relationships with architects. I have on previous occasions likened the architect to the captain of a cricket team, whilst an architect friend of mine (who may be here to-night) has likened him to the conductor of an orchestra, who need not be able to play every instrument. If we pursue this simile a little further, we might find the quantity surveyor always playing second fiddle, although the choice of this instrument may seem inappropriate. We must all realize the fact that we are separate professions, interlocked perhaps, but most certainly independent. There has never been such a person as an "architect and quantity surveyor," and I have yet to be convinced that the architect or engineer who attempts to perform the functions of a surveyor, is concerned only with efficiency and with service to the client, and not with financial considerations, however slight.

Many architects are our friends, but we have laboured under some disadvantage in the past since the distribution of patronage has been largely in the hands of the architect. We welcome signs that the architectural profession is treating us less as an appendage, and more as an important element in the whole contracting scheme and to this extent there has unquestionably been great improvement in our relationships.

In technical journals and elsewhere we poor quantity surveyors are constantly being informed that our efficiency and energy are contributing to the slackness and shortcomings of the architects. This is a change from the former contention that we were blaming the architects for lack of information to enable us to get on with our work. There has been much loose talk regarding the shortcomings of architects in providing us with information. No good can come from making uncharitable comparisons regarding the efficiency and energy of our respective professions. Are we justified in placing on the architect all the

blame for delay in preparing and carrying out a project? It would certainly assist greatly to solve our difficulties if the architect would call the quantity surveyor into consultation at a very much earlier stage in the proceedings than is customary; in fact, as soon as he has received instructions from the client. There are many matters, such as points of construction, availability of materials and local conditions, upon which the quantity surveyor can give sound advice before the working drawings stage is reached, and there need be no loss of dignity. On many occasions we find that in the early stages an approximate estimate has been given of figures arrived at of which we have no knowledge and which are rather unrealistic in the light of the tenders received. Vital changes may have been made in the scope and detail of the project, but the earlier this is established then the sooner the client can be made acquainted with the fact. Instead of keeping the surveyor in the background and perhaps regarding him merely as a necessary evil, cannot the architect give him a more prominent place in the discussions with the client? I know there is a growing tendency for architects to bring the surveyor into the meetings with the employer, but too often this does not happen until a *post mortem* is being held on the final accounts.

Fortunately we are not often involved in disputes or extreme differences of opinion between client and architect. When however such situations do arise the surveyor must exercise the greatest diplomacy and tact, and we must always remember that, while the employer is one party to the contract, the architect is its administering officer. If called on to give material information we must disclose it in the interests of both parties, but whatever action we take should clearly demonstrate our complete impartiality, despite the stresses of any conflicting loyalties.

I am not completely familiar with the present-day scope of architectural training, but I see no great evidence of extensive knowledge of the "commercial" side of the work if I may so term it. The framing of contracts, the placing of sub-contracts, and the issue of variations orders are some of the important matters upon which greater stress might well be laid and more light and guidance given. For that matter the young quantity surveyor could be benefited in a like manner. We appreciate that the creative artist has neither a great deal of time nor the inclination to concern himself with mundane matters such as timber permits, licences and the written confirmation of orders, but a more general attention to the latter alone would add materially to the expectation of life of the quantity surveyor.

I am greatly concerned about our relationships with officers in the public service. There are instances where the authority does not allow letters to be issued over the signature of the chief or senior quantity surveyor. Then there are architects to authorities who have to issue instructions that disagree with the Practice Notes of the Joint Contracts Tribunal and the like. Conditions of this kind must have the inevitable result of robbing the quantity surveyors employed by these authorities of the last shreds of independent thought and action. The nominated or "outside" surveyor suffers in a similar manner to some degree. I believe that as nominated surveyors on works for these authorities

we should claim the right to act in accordance with our experience and our consciences, and we must not be willing to accept too much dictation from the officers in the public service, for fear we lose one of our most valuable assets—our independence. To say that an architect in the local government service has a functional position and not a professional one is not the answer. Our status is similar to that of the architect in the Government and the Colonial Government Services, and surely this status can be maintained without detriment to the interests of the architects. Let us have equality of status between architect and surveyor in all branches of the public service. We have become so accustomed to direction from above—to which we submit too meekly—that we are in danger of allowing our professional judgment to be submerged by the dictates of treasurers, auditors and others who, whilst they may be steeped in financial wisdom, are not always expert interpreters of building contracts. Their opinions are seldom unanimous, and sometimes they are not helped by the terms of the contract form adopted by their authority.

There is also a movement afoot to re-establish the specification as a contract document. This raises an old bone of contention and again concerns our respective functions, for who should write the specification? We are all aware that in most cases it was written by the quantity surveyor and that, more often than not, it was a re-hash of the descriptions in the bills with locations added. But is such a document really wanted in these days of British Standards of quality and application of materials, for the bulk of description is now rightly taken care of in bills. The prime reason for the bill of quantities is still what it has always been, *i.e.*, to enable the contractor's estimator to arrive at his tender-offer with accuracy and speed, and to do this he wants the information ready to hand and preferably in one document. Therefore I think that all we need in the early stages of a project is a skeleton description of the materials and the vitally necessary schedules of such things as finishes, doors and windows. While the work is in progress, these schedules are all that is required in addition to the bills, plus any other clauses having particular reference to order and location. And who is better able to prepare these than the surveyor who took the quantities? We should cease telling the contractor how to mix concrete or the best method of laying one brick upon another. He has this knowledge already; if not then his name should not be on the list of invitations to tender. I do not like the practice of providing general specification in addition to the bills as well as a particular specification peculiar to the job.

I think that we must take second place to the architect in our relationships with clients and in most instances our contacts with the employer must be through or with him. If we compare the efficiency of our own contracting system with that of other countries we may verify that the clients themselves are still largely responsible for the delays and high expenditure so often incurred. Our initial task lies in making it clear to the client that having stated his wishes and requirements and appointed his professional advisers, he should leave them without interference to carry on with their already difficult task. In some new countries, architects and surveyors are together guiding the employer and when he gets out of step they bring the matter to his notice. It is a universally accepted maxim that the customer is always right, but we can, with advantage, point out that building is not a

(continued on page 408)

just as Warm *by the window...*



Sniffs and sneezes are seldom heard in this family. That's because there are no cold corners in the home, no treacherous draughts haunting the passages. Radiation ducted air spreads genial warmth all through the house—*warmth that can always be regulated to meet the needs of the day and hour.*

The Radiation system may be installed with either a solid fuel appliance which burns, without smoke, any solid fuel including bituminous coal, or as a fully automatic gas unit. Architects, housing authorities and others—especially those interested in smoke abatement—should write for literature explaining the system in full, or visit the experimental houses at Stanmore where both solid fuel and gas installations may be seen in action. But please apply first for an appointment to Radiation Group Sales Limited, Lancelot Works, Wembley, Middlesex. Telephone: Wembley 6221.



**Whole-house
Warming by
Radiation
ducted air**



Reproduced from: THE BOOK OF ENGLISH TRADES & Library
of the Useful Arts, 1821

THE CARPENTER

As the carpenter works, the sweet smell of wood shavings fills the air. Smoothing the rippled grain of fresh-planed wood, he caresses Beauty herself. The burring saw, the hissing plane, the tapping hammer are music to his ears . . .

AND CRAFTSMANSHIP LIVES ON With the coming of the Industrial Revolution and the development of machinery, the era of the lone craftsman passed into history. No longer was one man single master of his trade. Instead, the work was divided among specialists, each one a craftsman in his own particular line. To-day, the individual is an expert, whose specialised skill is an essential part of the whole.

★ **A**T CELLON we believe in the essence of craftsmanship. For example, after a new decorative finish has been produced by our laboratory specialists, it is tested by experts who examine every Cellon product under the conditions of use for which it is intended. Like the carpenter of old, who by the skill of his craft released the pent-up genius of wood, we always strive for perfection in our finished work.

The existing range of Cerrux Decorative Paints includes Gloss, Satin and Matt Finishes, Flat under-

coatings, Primers for all types of surface and, also, Cerrusco Texture and Water Paints. The skill and forethought embraced in our work together with constant research have established perfect uniformity among our standard finishes. The result is that you can always be sure of consistency of quality when re-ordering a particular finish.

On the development side, we maintain a continuous service for the production of special finishes for special needs outside the standard range. It is, in fact, a service by craftsmen for craftsmen.

CERRUX

DECORATIVE PAINTS

Created
by Craftsmanship



CELLON
Aircraft
Finishes



CERRIC
Wood
Finishes



CERRUX
Marine
Paints



CERRUX
Coach
Paints



CERRIC
Industrial
Finishes

CELLON LIMITED • KINGSTON-ON-THAMES • PHONE KINGSTON 1234

CW 2-372

CONSTRUCTION DETAIL

The floor unit illustrated below was used at the Lessness Primary School, illustrated in *The Architect & Building News* of March 16. This unit has been designed by Felix J. Samuely, B.Sc., A.M.I.C.E., M.I.Struct.E., to provide a relatively light floor or roof combined with strength and considerable saving in cost. This type of floor has also been used at Hatfield Technical College.

exact line & level easily adjusted by bolt at rear of unit

timber fillet

1" diam hole cast through unit.

8 $\frac{3}{4}$ "

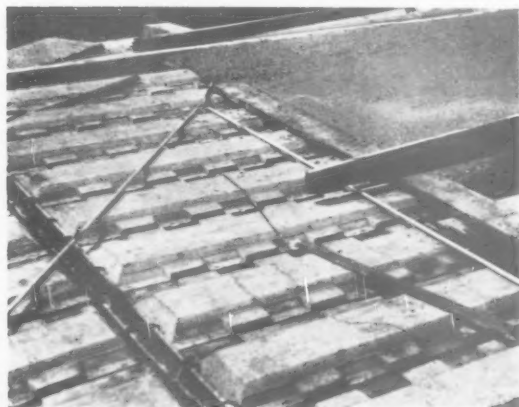
$\frac{1}{2}$ " diam nut welded to $\frac{3}{8}$ " diam gas tubing & cast in unit.

A

PRE CAST CONCRETE ROOF & FLOOR UNIT

The concrete thickness of each trough unit is only 1 in. The overall depth varies with the span. Thus for a span of 4 ft. 10 in. the overall depth of block is 3 in. For a span of 7 ft. 4 in. the overall depth is 3 $\frac{1}{2}$ in. Large span blocks are reinforced round the perimeter with continuous m.s. rod butt welded (see detail overleaf).

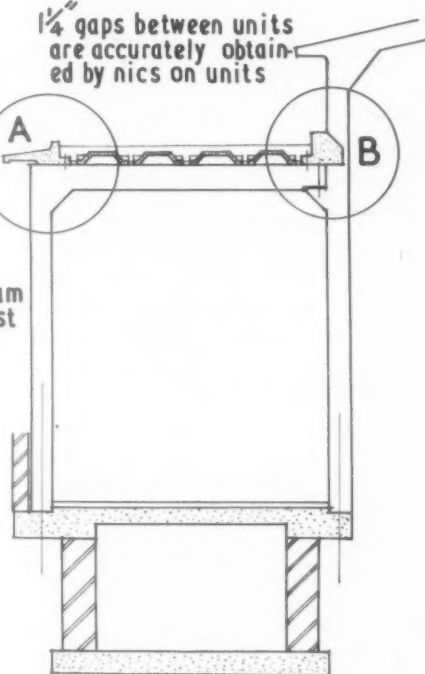
The photograph below shows how the surface, *in situ* concrete, by bonding with the projecting fillets on the block, completes a rigid structure. The underside of the floor or ceiling can be ceiled flush if necessary but at the Lessness School is left to show the corrugations. The cost of this type of floor works out at about 1s. a square foot.



$\frac{1}{4}$ " gaps between units are accurately obtained by nicks on units

A

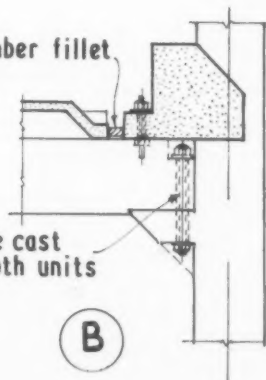
B



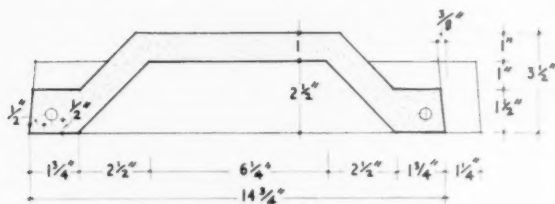
timber fillet

1" diam hole cast through both units

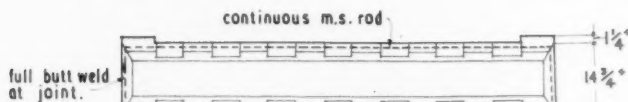
B



CONSTRUCTION DETAIL



DETAIL (A)



PLAN (A)

PRE CONCRETE ROOF AND FLOOR UNIT

Details of a 7 ft. 4 in. unit. The shorter units of 4 ft. 10 in. span are not reinforced and the width of cross section is 20 in. Design of the units varies to suit conditions on different jobs.

Quantity Surveyor, Architect, Contractor and Client

(continued from page 406)

plastic material to be squeezed and kneaded into shape at will. Change of intention by the client is perhaps the worst element with which we have to contend in endeavouring to keep down costs, and from my experience I find that Americans have to face the same problem. We know that the presentation of accounts and statements is quite an art and requires considerable skill and experience. We all wish to present the bill to the client in the most lucid and acceptable form and in so doing we have to keep ever in mind the keen interest the contractor is also going to take in all the material facts and figures.

When a quantity surveyor is being commissioned for the first time by a client, the architect can render a considerable service by giving a clear, if concise, idea of the scope of the surveyor's functions and how they tie in with his own. It may frequently happen that the surveyor has no early opportunity to do this himself, and much subsequent embarrassment can be obviated if the client knows in advance the services covered by the various professional charges. This is even more important where committees or corporate bodies are involved. Greater difficulty arises over the settlement of accounts, and the uninformed client can be left with the impression that he is being charged twice for the same service. This is particularly unfortunate when we consider that the control of the volume of variations is not in the hands of the surveyor. Although our professional charges are our own concern and can safely be left to our own care, I think that, together with the architect we should try to give the client a forecast of his overall commitments. But I do not like the composite scale of fees covering the preparation of bills of quantities, certificates and settlement of accounts.

In our relationships with the contractors,

I see no good reason why a continuous state of guerilla warfare should exist. Mr. Robert Lloyd, the leader of the Anglo-American Productivity Team, issued an appeal to architects and clients "to learn to trust your contractor." We can all support that plea and we should take the line that all contractors are to be trusted until their actions prove the contrary. I consider our duty to be as much to the contractor as to any other party to the contract, and I dislike intensely the attitude of mind which infers that the quantity surveyor should take advantage of any opportunity to withhold beneficial information from the contractor. I would equally ask all contractors to restrain their flights of fancy and give us the facts when we ask for them in order that they may assist us to maintain our position as arbiter. Although we are trained to be coldly calculating and precise, I hope we have a spark of sympathy for the unfortunates who make losses upon contracts. It is still a never-changing source of wonder to me that, surrounded as we always are—or rather appear to be—with dozens of contractors all losing money, our contracting system is still reasonably successful. Seriously, however, we must always remember that quantity surveyors owe their continued existence to a successful contracting system.

It was not my deliberate intention to keep the contractor until last. It was merely that the contractor's interests are so bound up with a discussion of our position with the architects and employers, that the solutions of our problems may provide the answers to many of his.

I am greatly impressed by the arguments advanced in favour of shortening quantities or the Standard Method of Measurement by a process of "boiling down." The good Bill of Quantities is the one which contains all the items necessary to frame a good

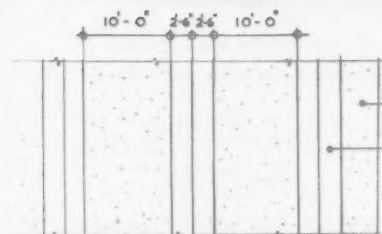
estimate. Alterations leading to economy in words must be welcomed by us all, but any tendency to cut out necessary information is to be deprecated. Again it is for the contractors to say whether we are giving them the assistance they require, and if not, they must inform us of the direction in which we should move. It has been suggested that, if we all decide to "condense" our Bills of Quantities we shall afford greater scope to the less scrupulous contractor for the exercise of his ingenuity in finding loopholes in the bills and pegs on which to hang claims. I think that there is some danger here, and therefore we must move cautiously in any attempt to "concentrate" the items or descriptions in quantities.

The selection of firms of contractors to be invited to tender for a project is a subject in which we naturally take a keen interest. We are frequently asked by architect or client to express an opinion on a proposed selection, to be given in the light of our knowledge and experience. I know that one or two of our senior members are not very ready to take any responsibility for the selection of the lists of contractors, but I see no serious objection to our passing comment (if invited) freely and without bias. Do we not all know of occasions when it is proposed to invite a firm or firms who would be so obviously out of their element for the particular type of work? We have also seen the disastrous results which can arise from the indiscriminate invitation of firms, amongst whom there may be some with few pretensions to suitability for the tasks involved, including too frequently the firm whose tender is lowest.

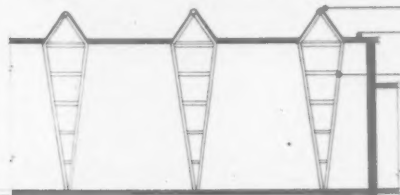
The system of "open tendering" which is obligatory on many authorities may be criticised although it receives a certain measure of support. A rota system seems to have its merits, but I am aware that any proposals to form classifications or grades of contractors have met with stiff opposition mainly from the industry itself. But this remains a problem of vital concern to client, architect and quantity surveyor which still demands a solution.

It is probably true to say that to-day the majority of building contractors have confidence in the impartiality and correct conduct of the qualified surveyor, and in many cases they are very willing to leave the settlement of their affairs in our hands. This makes me wonder what is the primary purpose of the extensive surveying department set up by some firms. We know they deal with payments on account, sub-traders' work, and—busting, but can it be that sometimes these large and highly geared machines are concerned mainly with potential claims on the contract?

I have recently visited Central and East Africa where registration is in operation on a firm basis. I was privileged to attend meetings of a Registration Board, and also those of a composite Society of Architects and Quantity Surveyors. I found both of absorbing interest and I think that we would benefit greatly from a closer liaison of the same kind. I am not advocating the formation of further societies for we have enough bodies already. But I recommend closer links with architects and contractors, so that we may exchange views, discuss mutual problems on a personal basis, thrash out our difficulties, and even make constructive criticism of the work of the respective practitioners. More good work could be done by the Junior Organization discussion groups, if further invitations were issued to some of the younger architects and builders. I am aware we have Joint Committees, Liaison Committees and the like, but these are mainly concerned with policy matters. We need something a little less formal if we are to exchange ideas freely.



ROOF PLAN

SCALE $\frac{1}{16}$ TO 1 FT.SECTION THROUGH DESPATCH
STORES SHOWING ROOF
GLAZING

STEEL DECK ROOFING

PATENT GLAZING

18 GAUGE
ALUMINIUM
SHEET HOOD

PATENT GLAZING

STEEL DECK
ROOFINGSTEEL COLUMNS
AT 42' CENTRESALUMINIUM PATENT
GLAZING BARS AT
2'-0 1/2" CENTRESGEORGIAN WIRED
ROUGH CAST GLASSINTERLOCKING LUG PIECES
CONNECTING DIAGONALS TO
PIN JOINTS

SQUARE TUBE DIAGONALS

MINERALISED FELT
ON FIBREBOARDPIN JOINTS AT 4' 1" C.C.
MIDWAY BETWEEN GLAZING
BARS5' 3 3/8" LONG SQUARE TUBE
TIES AT 4' 1" C.C.ALL CLEATS, LUGS & SPLICE
MEMBERS, ALUMINIUM ALLOY

ALL BOLTS ALUMINIUM ALLOY

ALL RIVETS COLD DRIVEN

9' 8 1/4" GALVANISED PRESSED
STEEL UNIT DECKING SHEETSSQUARE TUBE
SECTION $\frac{1}{2}$ F.S. $\frac{1}{2}$ F.S. DETAIL OF ROOF GLAZING



ROOF GLAZING, FACTORY AT DUXFORD
ARCHITECTS: OVE ARUP & PARTNERS

Notes below give basic data of contracts open under locality and authority which are in bold type. References indicate: (a) type of work, (b) address for application. Where no town is stated in the

CONTRACT • NEWS •

address it is the same as the locality given in the heading, (c) deposit, (d) last date for application, (e) last date and time for submission of tenders. Full details of contracts marked * are given in the advertisement section.

DENNISON KETT & CO. LTD.

ROLLING SHUTTERS & GRILLES • IRON DOORS STAIRCASES • LIFTS COLLAPSIBLE GATES

KENOVAL HOUSE
226-230, FARMERS ROAD
LONDON, S.E.5. Phone RELiance 4266

KIRK & KIRK LIMITED

Building and Civil
Engineering Contractors

ATLAS WORKS
PUTNEY • S.W.15

TELEPHONE: PUTNEY 7244

There has been a "Stannah" in the industry since 1867

STANNAH LIFTS

LIMITED

PASSENGER, GOODS & SERVICE LIFTS
49-51, TIVERTON STREET, LONDON, S.E.1
Telephones: HOP 1211-3063

ENGERT & ROLFE LTD.

COPPERTRINDA

The best Dampcourse yet produced

POPLAR, E.14. EAST 141

DAMP WALLS CAN BE MADE WITH ONLY BONE DRY

ONE COAT OF

Penetrex

WATERPROOFING LIQUID

Absolutely Colourless, Penetrex does its job thoroughly, on all surfaces, Outside or Inside. One gallon covers 30 Square Yards. Sold by Builders' Merchants in all sizes from Quart size to 15 Gallon drums. Send for prices and name of nearest Stockists to:

F. A. WINTERBURN LTD.
(Incorporating Litva Products)

HOLBORN STREET, LEEDS, 6 Tel.: 25002

OPEN

BUILDING

ALSAGER U.C. (a) 70 houses and site works, Close Lane. (b) Engineer and Surveyor, Council Offices, 3 Lawton Road. (c) 2 Gns.

ASHBY-DE-LA-ZOUCH R.C. (a) Brick garage at the Sewage Disposal Works, Measham. (b) Council's Surveyor, South Street. (a) Apr. 16.

AXMINSTER U.C. (a) Block of 4 flats, Fox Hill Estate. (b) Messrs. Powell & Powell, Grosvenor Chambers, 32 The Terrace, Torquay. (c) 3 Gns. (e) Apr. 21.

BIRKENHEAD. (a) 130 houses, Woodchurch Estate. (b) H. J. Rowse, Martins Bank Building, Water Street, Liverpool. (c) 5 Gns. (e) Apr. 30.

BERKSHIRE C.C. (a) Primary School at Blenheim Road, Maidenhead. (b) County Architect, Wilton House, Parkside Road, Reading. (c) 5 Gns. (d) Apr. 14. (e) May 3.

CLACTON U.C. (a) 12 flats in 3 blocks at Melbourne Road, 8 flats in 2 blocks and a pair of houses at Beaumont Avenue, pair of houses at Carrs Road. (b) Engineer and Surveyor, Town Hall. (c) 2 Gns. (e) Apr. 16.

CLEETHORPES B.C. (a) 5 pairs of houses and 6 pairs of houses, on Davenport Drive, site. (b) Borough Engineer, Council House. (c) 2 Gns. (e) Apr. 19.

ESSEX C.C. (a) Area offices at Park Road, Colchester. (b) County Architect, County Hall, Chelmsford. (d) Apr. 14. Approx. cost £14,200.

FAREHAM U.C. (a) Pair of houses at the old Isolation Hospital. (b) Engineer and Surveyor, Westbury Manor. (c) 2 Gns. (e) Apr. 27.

HAMPSHIRE C.C. (a) Additions to County Farm Institute, Sparsholt, to include erection of 2 pairs of houses. (b) Messrs. Harris & Porter, 103 Palmerston Road, Southsea. (c) 1 Gn. payable to Council, forwarded to J. B. F. Cowper, 39 Gordon Square, W.C.1. (e) Apr. 27.

HEREFORDSHIRE C.C. (a) Structural alterations, additions and decorations at Old People's Home, Belle Orchard House, Ledbury. (b) County Welfare Officer, 10 St. Owen Street, Hereford. (c) 2 Gns. (d) Apr. 9.

HOLYWELL U.C. (a) 23 houses, Greenfield site. (b) F. C. Roberts, Earl Chambers, Mold. (c) 3 Gns. (a) Apr. 23.

KEYNSHAM U.C. (a) 37 houses, Norman Estate, Saltford, Bristol. (b) Engineer and Surveyor, Council Offices. (c) 2 Gns. (e) Apr. 16.

LANCASTER C.C. (a) 4 flats in 3 blocks, Hala Estate. (b) City Engineer, Town Hall. (c) 2 Gns. (e) Apr. 25.

LONDON—CHINGFORD B.C. (a) 8 shops with two-storey maisonettes above at Old Church Road. (b) Borough Engineer, Town Hall, E.4. (c) 2 Gns. (e) Apr. 23.



for

PROTECTIVE DECORATION

internal & external



THE ADAMITE COMPANY LIMITED

MANFIELD HOUSE, STRAND, W.C.2

BRIGHT'S ASPHALT

ST. MARY'S CHAMBERS,
161a STRAND, LONDON, W.C.2

Telephone No.: TEMPLE Bar 7156

MULLEN AND LUMSDEN LIMITED

Contractors and
Joinery Specialists
41 EAGLE ST., HOLBORN
LONDON, W.C.1

Telephones: LONDON: CHANCERY 7422/3/4. CROYDON: ADDISCOMBE 1264.

CHAIRS OF SUPERIOR QUALITY

CHEAP Chairs for Canteens,
British Restaurants, Halls,
etc. Personal attention given
to all Orders.

Mealing Bros. Ltd.

Avenue Chair Works,
West End Road,
High Wycombe.

Telephones: Wycombe 499. Catalogue on application.



MORLEY B.C. (a) 12 houses, 16 houses, 30 houses, 38 houses, at Asquith Avenue Estate. (b) Housing Director, National Provincial Bank Chambers, Queen Street. (c) 2 Gns. (e) Apr. 16. All or separate trades.

NEWCASTLE-UNDER-LYME B.C. (a) 100 houses, in groups of 28, 34, 62 or 100 houses, Windermere Road Estate. (b) Town Clerk, District Bank Chambers, Penkull Street. (c) £2. (d) Apr. 13.

NEWHAVEN U.C. (a) 20 dwellings and 4 shops with 3 flats above, Meeching Estate. (b) Engineer and Surveyor, Council Offices. (c) 2 Gns. (e) Apr. 16.

NORTH KESTEVEN R.C. (a) 18 houses and 2 bungalows, Skellingthorpe; 18 houses, Wellingore; 4 houses, Bassingham. (b) J. Chadwick, 31 Clasketgate, Lincoln. (c) 2 Gns. (e) Apr. 19.

PORTSMOUTH C.C. (a) 8 shops and 9 maisonettes, Paulsgrove Shopping Centre. (b) Messrs. Thomas, Jolly & Grant, Coronation House, King's Terrace. (c) 3 Gns. (d) Apr. 10.

REDCAR B.C. (a) 2 blocks of 4 shops and maisonettes, Dales Estate. (b) Borough Engineer, Municipal Buildings. (c) 5 Gns. (e) Apr. 17.

RUISLIP-NORTHWOOD U.C. (a) 60 houses, Castleton Road, Eastcote. (b) Engineer and Surveyor, Council Offices, Oaklands Gate, Northwood. (c) 2 Gns. (e) Apr. 23.

ST. FAITH'S AND AYLSHAM R.C. (a) 14 houses, Aylsham; 4 at Salhouse; 6 bungalows, Salhouse; 10 houses, Sprowston. (b) F. M. Dewing, 40 Prince of Wales Road, Norwich. (c) 1 Gn. each site. (e) Apr. 17.

ST. HELENS B.C. (a) Alterations and additions to Children's Reception Home at Park Farm, Carr Mill. (b) Borough Engineer, Town Hall. (c) 2 Gns. (e) Apr. 24.

SALOP C.C. (a) New child welfare centre at Newport. (b) County Architect, Column House, London Road, Shrewsbury. (c) 2 Gns. (e) Apr. 16.

SCOTLAND—EDINBURGH C.C. (a) Lavatory accommodation at Pennywell School. (b) City Architect, City Chambers. (e) Apr. 14.

SHEPTON MALLET U.C. (a) 16 houses at Ridgeway. (b) Council's Clerk, Council Offices, Market Place. (c) 2 Gns. (e) Apr. 20.

STEVENAGE DEVELOPMENT CORPORATION. (a) 2 pairs of houses at Julians Road and Grove Road. (b) Chief Architect, Aston House, Aston. (c) 2 Gns. (e) Apr. 30.

STOKESLEY R.C. (a) 2 houses at Carlton, 6 at Great Ayton, 4 at Hutton Rudby, 8 at Ormesby, 4 at Stainton 12 at Stokeley, 2 at Swainby and 8 at Yarm. (b) Engineer and Surveyor, Council Offices. (c) 2 Gns. (e) Apr. 16.

SUNDERLAND B.C. (a) Supply and erection of structural steelwork for primary, junior and infants' schools at East Pennywell. (b) Messrs. W. & T. R. Milburn, 17 Fawcett Street. (c) 2 Gns. (e) Apr. 13.

HIGH QUALITY WHITE FACING BRICKS

(S.P.W. BRAND)

As supplied to the WAR OFFICE, H.M. MINISTRY of WORKS, AIR MINISTRY, Etc.

Sample and Brochure
sent on request

**M. MCCARTHY
& SONS, LTD.**

BULWELL · NOTTINGHAM

ALBION TWW WORKS

PAVING TIMBERS AND SLEEPERS

Large quantities of Secondhand Wagon Headstocks and Solebars, 7ft. Sims. and 14ft. 6in. approx. by 12in. x 5in.; sound oak, with usual holes, suitable for temporary roadways, packing timbers, sleepers, etc. Available Sheffield, Yorks, or Glasgow districts. Prices for quantities on application to

THOS. W. WARD LTD.

Wagon Dept.

ALBION WORKS: SHEFFIELD

Phone: 26311, ext. 333.

R. Wm. LOCKWOOD

**BUILDERS & CONTRACTORS
JOINERY & DECORATORS, Etc.**

345 GREEN LANE · ILFORD

Telephone No : Seven Kings 7551

"ALTRINDA" DAMPCOURSE

Supplied from Stock

**ENGERT & ROLFE LTD.
Poplar E.14. East 1441**

RIBA INTER, FINAL & SPECIAL FINAL

Postal Courses in all subjects of the 1951 exam syllabus (including Professional Practice) are conducted by

The ELLIS SCHOOL of ARCHITECTURE

Principal: A. B. Waters, M.B.E., G.M., F.R.I.B.A.
1030, OLD BROMPTON RD., LONDON, S.W.7
Phone: KEN 8641 and at Worcester

LEWIS BITUMEN & ASPHALT Co. Ltd.

BARKING, ESSEX

Rippleway

2977.

LEWIS'

**MASTIC
ASPHALT**

For
Roofs,
Tankings, Paving,
Coloured Floors, etc.
To B.S.S.

SUTTON AND CHEAM B.C. (a) 21 dwellings for aged persons at Burnell Road Brunswick Road, Sutton. (b) Borough Engineer, Municipal Offices, High Street. Sutton. (c) 5 Gns. (d) Apr. 11. (e) May 18.

WEST SUSSEX C.C. (a) Secondary school at Horsham. (b) County Architect, County Hall, Chichester. (d) May 2.

WEST SUSSEX C.C. (a) Alterations and additions to property to provide reception home for children at "Abbotswood," Rustington. (b) County Architect, County Hall, Chichester. (d) Apr. 13.

WINDSOR R.C. (a) 6 pairs of dwellings, block of 6 bungalows, block of 4 dwellings, at Bedford Lane, Sunningdale. (b) Louis H. Gray, Four Winds, Sunningdale. (c) 2 Gns. (e) Apr. 16.

WORCESTERSHIRE C.C. (a) Erection of first portion of a new college of further education at Oldbury. (b) Messrs. E. C. Harris & Partners, 3 Bedford Square, W.C.1, immediately. (c) 2 Gns. payable to Messrs. Harris. Approx. cost £120,000.

PLACED

Notes on contracts placed state locality and authority in bold type with (1) type of work, (2) site, (3) name of contractor and address, (4) amount of tender or estimate. † denotes that work may not start pending final acceptance, or obtaining of licence, or modification of tenders, etc.

BUILDING

ACTON B.C. (1) 54 flats. (2) Oldfield Estate. (3) C. F. Kearley Ltd., British Grove, W.4. (4) £87,956.

BRYNMAWR (BRECON) U.D.C. (1) Ten blocks of flats. (2) Clydach Street. (3) Gee, Walker & Slater Ltd., Park Lane, London, W.1. (4) £44,729.

BRISTOL CORPORATION. (1) Buildings and traffic police accommodation. (2) Rupert Street. (3) C. H. Pearce & Sons (Contractors) Ltd., Westbury-on-Trym. (4) £20,170.

BROMSGROVE U.D.C. (1) 40 houses. (2) Charford. (3) Mackee & Rodway Ltd., Northway, Bromsgrove. (4) £44,856.

BRISTOL CORPORATION. (1) Repairs. (2) Bourton Grange, Flax Bourton. (3) J. Moseley, 1 Belgrave Road, Weston-super-Mare. (4) £10,840.

CHELMSFORD CORPORATION. (1) 24 houses. (2) Chignall Estate. (3) Brown & Leggatt, 54 Havering Drive, Romford. (4) £33,222.

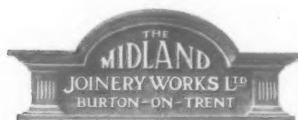
CARDIGAN C.C. (1) Biological laboratory. (2) Llandyssul Secondary School. (3) J. Davies, Station Road, Llandyssul.

CATERHAM. (1) Kitchen modernisation. (2) St. Lawrence's Hospital. (3) Grace & Marsh Ltd., New Building Works, Waddon, Croydon. (4) £16,256.

EASTBOURNE. (1) Rebuilding. (2) 3 Staveley Road. (3) G. Gower & Sons Ltd., 50 Tidswell Road, Eastbourne.

HORNEY B.C. (1) 48 flats. (2) Brooke Road, Campbourne. (3) F. W. Padwick, 141 Ballards Lane, N.3. (4) £76,025.

HALIFAX CORPORATION. (1) First two phases of extensions. (2) Technical College. (3) L. & W. Morrell Ltd., Low Moor, near Bradford. (4) £354,000.



The Sign of Quality

One of the best and most dependable names in Joinery.

THE MIDLAND JOINERY WORKS LTD.,
BURTON-ON-TRENT

Established 1921. Tel. Burton 3685 (3 lines)

'LURIFUGE' FIRE-PROOF PAINT

Enquiries to—
(Sales) LURIE LABORATORIES LTD.,
93 FRAMPTON ST., LONDON, N.W.8
Telephone: AMB. 5563

By Appointment to H.M. The King
LIGHTNING CONDUCTOR SPECIALISTS
J. W. GRAY & SON Ltd.
37 RED LION ST. HIGH HOLBORN
LONDON W.C.1. Tel. CHANCERY 8701
Lightning Conductor Specialists
and Church Spire Restorers

TENTEST INSULATING
BOARD AND
HARDBOARD
Made in Canada
TENTEST FIBRE BOARD CO., LIMITED
75, Crescent West, Hadley Wood, Barnet, Herts
Phone: Barnet 5501 (5 lines)

NEW FLOORS for OLD
Wood Floors Planed, Sanded,
Repaired and Treated
FLOOR RENOVATIONS Ltd
38 LAURISTON RD., E.9. Phone: AMH 1000
Sanding machines for hire

Magnesite Jointless Flooring
Prices from 11/3 per sq. yd. (dependent
on area) laid direct on to concrete sub-
floors
MODERN TILE & FLOOR COMPANY LTD
62, 62a Brewery Road, London, E.7
Tel.: NORTH 4611-2

**FIRE!
WHERE'S YOUR
NU-SWIFT?**

The World's Fastest Fire Extinguishers
— for every Fire Risk
Pressure-operated by sealed CO₂ Charges
NU-SWIFT LTD. • ELLAND • YORKS
In Every Ship of the Royal Navy

HEYWOOD, LANCs. (1) Extensions. (2) Roe Acre Mill. (3) Parker & Calvert Ltd., Pine Street, Heywood.

KENSINGTON B.C. (1) 12 aged persons' flats. (2) St. Mark's Place. (3) A. T. Rowley (London) Ltd., Cambridge Works, Lordship Lane, N.17. (4) £13,444.

LONDON, E. (1) Rebuilding wharf and other buildings. (2) Plaistow Wharf, Victoria Docks. (3) John Mowlem & Co. Ltd., Ebury Bridge Road, S.W.1. Consulting engineers: L. G. Mouchel & Partners, 38 Victoria Street, S.W.1.

LONDON, CITY. (1) Reinstatement. (2) 6 Lloyds Avenue, E.C.3, for City and General Properties Ltd. (3) Bridge, Walker Ltd., 91 Effra Road, Brixton, S.W.2.

LONDON COUNTY COUNCIL. (1) Extension of contract to include Block 5 of flats. (2) Tabard Gardens Estate. (3) Speirs Ltd., 66 Victoria Street, S.W.1. (4) £76,120.

MERTON AND MORDEN B.C. (1) Flats. (2) Central Road. (3) Orchard & Reed (London) Ltd., Station Approach, Wandsworth Common, S.W.2.

MANCHESTER REGIONAL HOSPITAL BOARD. (1) New wing. (2) Lancaster Moor Hospital. (3) A. Robinson & Sons (Morecambe) Ltd., West End Road, Morecambe. (4) £12,450. (1) Modernisation of male nurses' home. (2) Prestwich Hospital. (3) G. & W. Dawson & Co., Lower Crumall, Manchester.

MATLOCK U.D.C. (1) Houses and flats. (2) Hurst Farm. (3) Butterley Co., Ripley, Derbyshire. (4) £7,770 and £27,835.

NEWCASTLE-ON-TYNE CORPORATION. (1) Alterations. (2) Jesmond Dene House. (3) R. W. Bell (Builders) Ltd., Jesmond, Newcastle-on-Tyne. (4) £23,942.

PADDINGTON B.C. (1) Block of 12 flats. (2) Queen's Park Court Estate. (3) Holloway Bros. (London) Ltd., Westminster, S.W.1. (4) £21,689.

ST. PANCAS B.C. (1) 44 flats. (2) Wilming-ton Terrace. (3) Gee, Walker & Slater Ltd., Park Lane, London, W.1. (4) £116,639. (1) Block of flats. (2) St. Pancras Way. (3) Harry Neal Ltd., Baker Street, W.1. (4) £81,081.

STOKE-ON-TRENT E.C. (1) Additions, etc. (2) Longton School of Art (Sutherland) Institute and Longton Technical School. (3) The Northmere Building Co. Ltd., 21 Hope Street, Hanley, Staffs. (4) £14,091 and £8,402.

STOKE-ON-TRENT E.C. (1) Primary school. (2) Springfields. (3) C. Cornes & Son, Lichfield Street, Hanley. (4) £57,720.

SOUTHALL B.C. (1) 12 flats. (2) Green Oaks site. (3) A. Watson Ltd. (4) £17,932.

WELLINGBOROUGH U.D.C. (1) 56 houses. (3) Drabble Construction Ltd., College Street, Rushden. (4) £70,781. (1) 20 houses. (2) Hill Hall Farm Estate. (3) Drury & Co. Ltd., Windmill Avenue, Kettering. (4) £25,252.

WYFMOUTH. (1) Physiotherapy department. (2) Portway Hospital. (3) W. T. Nicholls (Southern) Ltd., Connaught Road, Weymouth. (4) £2,700.

YORKSHIRE C.C. (1) School. (2) Heckmondwike. (3) L. & W. Morrell Ltd., Moor-side Works, Low Moor, Bradford.



**BUILDERS AND
PUBLIC WORKS
CONTRACTORS**

DAVIS RD., SURBITON, SURREY
Telephone: ELMbridge 7112-3-4-5

BETTERWAYS LTD.
INTERCHANGEABLE LINE
and LETTER SIGNS
WORTON WORKS, WORTON ROAD
ISLEWORTH, MIDDLESEX.
HOUNSLOW 2100

The **WARRY UNIVERSAL HOIST**
WITH AUTOMATIC SAFETY GATES
Designed to comply with the Building Regulations
The Warry Patent Building Equipment
Co., Ltd.
FAGGS ROAD, FELTHAM, MIDDLESEX
Telephone: FELTHAM 4057-58

London's finest new & secondhand Value
ARCHITECTS' PLAN CHESTS

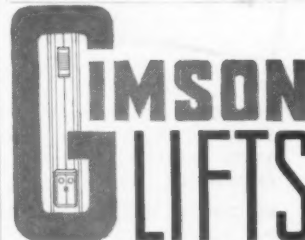


ENGERT & ROLFE LTD.
INODOROUS FELTS
FROM STOCK
POPLAR E.14. EAST 1441

QUANTITY SURVEYING

Postal Courses for R.I.O.S., I.A.A.S. and I.Q.S. exams, in all subjects of each syllabus. Tuition by well qualified tutors under the direction of the Principal, A. B. Wators, M.B.E., G.M., F.R.I.B.A. Descriptive booklet on request.

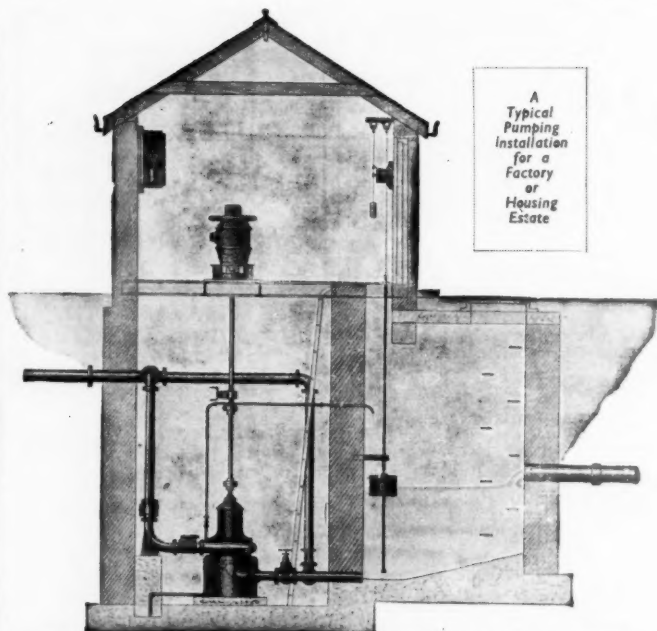
THE ELLIS SCHOOL
1626, OLD BROMPTON RD., LONDON, S.W.7
Phone: KEN 8641 and at Worcester



Service is available
throughout the country

GIMSON & CO. (LEICESTER) LTD
VULCAN ROAD, LEICESTER

Telephone LEICESTER 60272
Telegrams GIMSON LEICESTER



A
Typical
Pumping
Installation
for a
Factory
or
Housing
Estate

For particulars of
**SEWAGE PUMPS,
EJECTORS,
DISPOSAL
WORKS
EQUIPMENT,
VALVES,
PENSTOCKS,
AND ROAD
IRONWORK**

Write or
Telephone

ADAMS HYDRAULICS Ltd. YORK

London Office: 15 DARTMOUTH St., S.W.1. Phones: York 2047. London Whitehall 8235

*The Quality Felts,
Roofings &
Dampcourses*

★
WRITE FOR SAMPLES
AND LITERATURE



THE QUALITY OF BLACKWELLS ROOFINGS SETS A STANDARD FOR ALL ROOFING PRODUCTS. OVER 50 YEARS' EXPERIENCE MAKES IT POSSIBLE TO OFFER MOST EXCEPTIONAL VALUES.

BLACKWELLS FELTS & DAMPCOURSES ARE MANUFACTURED IN ACCORDANCE WITH THE APPROPRIATE BRITISH STANDARD SPECIFICATIONS.

BLACKWELLS & NATIONAL ROOFINGS LTD

ALTRINCHAM - CHES.
TEL: ALTRINCHAM 2641



ERITH - KENT
TEL: ERITH 2041



CARRON STEAM JACKETED PAN (P.40)

Cast iron outer pan with stainless steel or cast iron inner pan • Hinged cover fitted with heavy gun metal hinges and counter balance weight behind pan ; lifting handle with bakelite grip to keep hand clear of vapour when opening • Outer casing can be of sheet steel vitreous enamelled or stainless steel dull polished • Fitted with heavy gun metal draw-off cock with full-way cleaning screw, steam inlet valve and mounted on heavy cast iron pedestal base • Made from 10 to 100 gallons capacity. Write for technical details and prices.

This is a Carron product made by modern Carron processes embodying the Carron tradition for fine workmanship begun in 1759.



CARRON COMPANY • CARRON • STIRLINGSHIRE

Showrooms : 15 Upper Thames St., London, E.C.4. 22-26 Redcross St., Liverpool, 1
125 Buchanan St., Glasgow, C.I.



HARDWEARING

FLOORINGS

**IN
COLOURED ASPHALT
OR
DECORATIVE TILES**

**THE
LIMMER & TRINIDAD**

PAVE ASPHALT CO., LTD.
STEEL HOUSE, TOLHURST ST., WESTMINSTER, LONDON, S.W.1
TELEPHONE : WHITEHALL 6776



RUINS THE BEST OF PLANS...



... be sure to specify

BRIGGS

AQUALITE

BITUMEN DAMPCOURSE

'laid in a minute... lasts as long as the wall.'
PREVENTS DAMP AND DRY ROT

WILLIAM BRIGGS & SONS LTD., DUNDEE - LONDON: VAUXHALL GROVE, S.W.8
Branches at Aberdeen, Edinburgh, Glasgow, Leicester, Liverpool, Norwich
D.C.7

HALL WIDE SPAN TIMBER BUILDINGS

For CANTEENS • STAFF RECREATION
ROOMS • WORKSHOPS *for* LIGHT WORK



Hall's are renowned for their timber buildings not only as manufacturers but as prime designers and pioneers. Your needs receive the personal attention of those responsible for the high Hall standard and any building purchased is backed by the reputation, skill and integrity of Halls of Paddock Wood. Buildings for Industry, Education, Sport, Municipal or Constructional needs. Site offices and Contractors' Huts also supplied. Let us quote for your requirements. Supplied free of licence. Write to

HALL'S Dp. A4. **PADDOCK WOOD**
TONBRIDGE KENT

Fire Automatically Sealed!



with

CURFEW FIREPROOF DOORS

Also Manufacturers of Collapsible Steel Gates

CURFEW DOORS & SHUTTERS LTD.

CURFEW WORKS, ANCOATS, MANCHESTER, 4

Tel: COLLYHURST 2018

TUDOR WORKS, PARK ROYAL, N.W.10. Tel: ELGAR 6954

FOR YOUR ROOFING PROGRAMME

SLATES are BEST

U S PENRHYN

E RED, BLUE & GREY

SLATES

Apply

PENRHYN QUARRIES,

B. G. F. Adlington, Agent,

PORT PENRHYN, BANGOR, N. WALES

ACTUAL MANUFACTURERS OF

PLYWOOD and VENEERED PLYWOOD

SPECIALITY — PANELLING

TO

ARCHITECTS' SPECIFICATIONS

RELIABLE PLYWOOD COMPANY LIMITED

PROGRESS WORKS, WARBURTON STREET, LONDON, E.8

Telephone: CHasold 8135/6

Telegram: Reliably-Hack, London

Thermacoust

CHANNEL REINFORCED
WOOD WOOL ROOFING SLABS



Temporary Shops, Faversham, Kent.
Kings-ton-upon-Hull, showing flat roofs of
Thermacoust Channel reinforced Slabs.
Andrew Rankine, O.B.E., A.R.I.B.A.

THERMACOUST Channel reinforced Slabs are light in weight, large in unit size, with exceptional structural strength. They keep buildings warm in winter, cool in summer. If left bare beneath they provide valuable sound absorption. Their ease and convenience of handling permits of rapid construction and they are being extensively used for roofs, flat or pitched, for municipal building, schools, factories, shops and office buildings. **Standard slabs 6ft. long; 6ft. 8in. and 7ft. slabs made to order.**

- ☆ NO purlins needed at less than 7ft. centres.
- ☆ NO timber rafters needed for tiled roofs.
- ☆ NO other insulating material has greater structural strength.
- ☆ NO ceiling essential; high sound absorption if left bare.

T.4

For Information Sheets and prices apply to:—THERMACOUST LIMITED
39 VICTORIA STREET, LONDON, S.W.1 (Abbey 2738)

down to details?

then
it's
as well
to remember...

that an important contributory factor to the safety and dependability of any new building is the use of ASHTON cables and flexibles for all lighting and power duties.

ASHTON cables and flexibles are manufactured to B.S.S. No. 7: 1946 amendment No. August 1949, P.D. 947.

ASHTON
CABLES & FLEXIBLES

AERIALITE LTD. CASTLE WORKS, STALYBRIDGE, CHESHIRE

MARRYAT-SCOTT LIFTS

Here are some of the questions answered for you by the Marryat-Scott Architects Lift Calculating Rule.

1. To what size should I trim my floors to permit the installation of a Passenger Lift to carry six persons?
2. What will be the load on the surrounding shaft walls?
3. How many people per hour could such a lift deal with, if for example, we agreed on a speed of 200 feet per minute?
4. What size Lift-Car do you recommend for carrying Beds and Stretchers in a Hospital?
5. Can I get a useful Lift for general goods in a shaft size of 6 feet x 6 feet and how large would the lift car be?

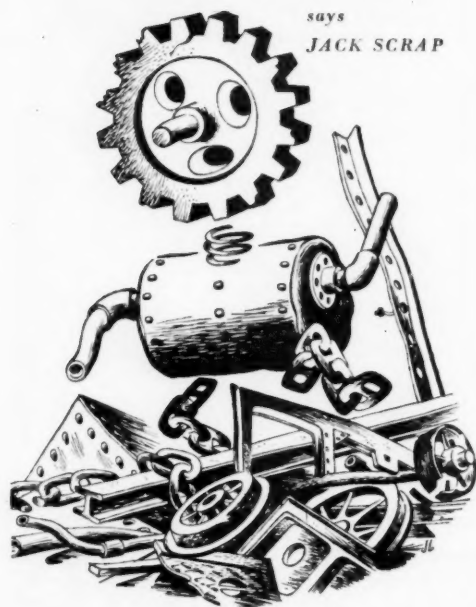


MARRYAT & SCOTT LTD
The Lift Manufacturers
Wellington Works, Hounslow, Middlesex

Now available free to Architects on request to any of these addresses:—

LONDON, 40 Hatton Garden • BIRMINGHAM, 41 Water St. • LIVERPOOL, 15 Tithebarn St. • BRIGHTON, 34 Chesham Rd.
BRISTOL, 29 Orchard St. • CARDIFF, 87 Queen St. • BRADFORD, 154 Harris St. • EXETER, 22 Oakfield Rd.
GLASGOW, Monour St. • CHELTENHAM, 107 St. Georges Rd. • BELFAST, 6.7 Queen St. • DUBLIN, 7/8 Eden Quay

'Get me out of this dump'



says
JACK SCRAP

How many tons of iron and steel scrap would you find in odd corners if you had a thorough search made?

Find that scrap, round it up, turn it in. Every ton of scrap that gets back to the steelworks will make a ton of new steel.

* Scrap Merchants are glad to help with dismantling and collection.

WANTED from the BUILDING INDUSTRY

Old girders, corrugated iron and scaffolding, covers and gullies and every kind of general and process scrap and obsolete plant.

SPEED THE SCRAP SPEED THE STEEL

Issued for the STEEL SCRAP DRIVE
by the British Iron and Steel Federation

STEEL HOUSE, TOTHILL STREET, LONDON, S.W.1

E.J.

Telephone:
ENfield 4877/8

Telegrams:
Quality, Enfield

SHUTTER CONTRACTORS LTD.

LINCOLN WORKS

ENFIELD

MANUFACTURERS OF

Quality

**ROLLING SHUTTERS
IN STEEL, WOOD &
ALUMINIUM ALLOY**
FOR ALL TYPES OF BUILDINGS

APPROVED MANUFACTURERS TO
F.O.C. AND L.C.C. REQUIREMENTS

CONTRACTORS TO
H.M. GOVERNMENT—ALL DEPARTMENTS
PUBLIC UTILITY COMPANIES, COUNCILS
PRINCIPAL RAILWAYS, INSTITUTIONS
Etc.

MANUFACTURERS OF

- Dutch Barns, Garages, etc.
- Pressed-steel Rainwater Goods
- Valley, Box and Wall Gutters
- Metal Scaffold Boards
- Brick Pallets
- Sheet Metal Work to any specification

SUPPLIERS OF

- Galvanised and Black Steel Sheets
- Iron and Steel Bars and Sections

Steel-framed

**AGRICULTURAL
& INDUSTRIAL
BUILDINGS**

All kinds of
**STRUCTURAL
STEELWORK**

Steel Stockholders
and Structural
and Sheet Metal
Engineers

H.L. Reynolds
LIMITED

DEPT. AG

OLD LEEDS STEEL WORKS, BALM ROAD,
Tel.: Leeds 76614-9. Grams: Corflot, Leeds

Leeds 10.

★ Dohm Vermiculite

FEATHERWEIGHT AGGREGATE
IN
Concrete, Plaster & Loose Fill

SLASHES DEADWEIGHT
INCREASES INSULATION

IN
SCHOOLS, FLATS, HOSPITALS
FACTORIES, POWER STATIONS, ETC.

★ DOHM LTD.

167, VICTORIA STREET, S.W.1. VIC. 1414/5/6 & 7913



for BATHROOMS, KITCHENS
CANTEENS, Etc.

Specify
VITROLITE wall-lining by

D. W. PRICE of NEASDEN
GLADSTONE 7811-5 and at N.W.10

PECKHAM ENFIELD TAUNTON

FUEL SHORTAGE—WARNING

Stocks of coal are
dangerously low.

A serious shortage will
close factories, cause
unemployment and bring
hardship to your home.

ACT NOW

by using less

COAL GAS ELECTRICITY

Issued by the National Coal Board, the Gas Council and British Electricity in support of the Ministry of Fuel & Power campaign.

THOUGH the recognised indexes of industrial production for January will not appear for a good many weeks yet, it is already clear that over a wide range of industry output since the turn of the year has changed significantly for the worse. On the basis of the latest figures, the "holocaust" in steel, copper, zinc, etc. The current troubles of the motor manufacturing industry have in particular been well publicised. Sheet steel deliveries to the industry were cut by 15 per cent. early in January and further cuts are expected. As a result, the production of many other goods is being held up.

EVERYONE is being asked to save coal, gas and electricity and the efforts of the nation must not be wasted in the factories.

In every factory fuel must be used to the greatest effect and economies made wherever possible.

Your extra care will help to keep industry working.

lish... though it is the most urgent. The Dutch have shown that it is possible to rationalise marketing... in the interests of both grower and brewer, i.e. too, must find a solution without delay.

Gordon, Kilmuir, of... Town, London, N.W. were killed when their car was in collision with a coach full of Tottenham Hotspur supporters at Stretton (Burland). A woman was seriously injured.

Dear... Miss... Temple... with the... of... taken... said

I sa
says

A BEA... May... away... 14th... before... route to

"It was... when I... thing is... best of... who mu... crossing... York in... to be"

Mr. Fica... from his... see the... have to... because... sailing... Lisbon... time is... Frazee

U.N
fro

From
News Cl

AMERI... turn... back... Nations... caused... cers south... Seoul

Turkist... with... ball... finally... fought... dug in... and the... were eight

Mine
Wash... U.S. Nav... the U.S... struck... Korea or... of the... four are

Airl
st

PLANE
air... Korean... carrying... military... freighter... Tokyo... supplies

More
Bonn... Navy... feel... are th

to

MONOPHALT

(REGISTERED)

THE MASTICS FOR
ROOFING, DAMPCOURSES, FLOORING, ETC.

COMPLYING WITH BRITISH STANDARD SPECIFICATIONS

SUPPLIED AND LAID BY

THE FRENCH ASPHALTE CO.

WHOSE BUSINESS IS INCORPORATED WITH THAT OF

HIGHWAYS CONSTRUCTION LTD.

IDDESLEIGH HOUSE, CAXTON STREET, LONDON, S.W.1.

PHONE: ABBEY 4386



Adamsez Ltd

SANITARY ENGINEERS AND
FIRECLAY MANUFACTURERS

SCOTSWOOD-ON-TYNE

London Showroom: 54, VICTORIA STREET, S.W.1.

KINNEAR

PATENT STEEL ROLLING
SHUTTERS

"Rolling" Shutters is a term indicative of class, not quality, but the word KINNEAR patented gives added significance and carries with it the assurance of superior service.



ARTHUR L. GIBSON & CO. LTD.

Tuckersham

Birmingham

Manchester

Glasgow

POST-WAR REBUILDING

PORTLAND STONE MONKS PARK STONE

THE BATH & PORTLAND STONE FIRMS LTD.

Head Office:
BATH
Tel.: 3248-9

PORTLAND
Tel.: 3113

LONDON OFFICE:
Grosvenor Gardens House, S.W.1
Tel.: VICTORIA 9182-3

LIFTS

by MORRIS

Herbert Morris Ltd
Loughborough

Engineering branches in London, Glasgow, Manchester, Birmingham, Leeds, Sheffield, Newcastle, Cardiff, Bristol, Dundee, Liverpool, Nottingham, Bury St. Edmunds, Belfast



FOR over forty years Libraco Ltd. have been designing and manufacturing furniture and woodwork of all descriptions for

LIBRARIES SCHOOLS & OFFICES

The illustration shows the HEATON BRANCH LIBRARY, BOLTON, equipped by Libraco Ltd.

Write for Illustrated Booklet.

LIBRACO

LIMITED
LOMBARD WALL, WOOLWICH RD.,
CHARLTON, LONDON, S.E.7.

Telephone: Greenwich 3388 & 3389.

OFFICIAL ANNOUNCEMENTS

APPOINTMENTS, CONTRACTS, TENDERS, SITUATIONS VACANT AND WANTED, FOR SALE, MISCELLANEOUS

RATE: 1/6d. per line, minimum 3/- average line 6 words. Each paragraph charged separately.

BOX NOS. add 6 words plus 1/- for registration and forwarding replies.

PRESS DAY Monday. Remittances payable to Iliffe & Sons Ltd., Dorset House, Stamford St., London, S.E.1. No responsibility accepted for errors.

APPOINTMENTS

LONDON COUNTY COUNCIL.

APPLICATIONS are invited for positions of ARCHITECTURAL ASSISTANT (salaries up to £80 a year) in the Housing and Valuation Department. Commencing salaries will be determined according to qualifications and experience. Engagement will be subject to the Local Government Superannuation Act, 1927, and successful candidates will be eligible for consideration for appointment to the permanent staff on the occurrence of vacancies.

Successful candidates will be required to assist in the design, layout and preparation of working drawings for housing schemes (cottages and multi-story flats) and will be employed in the Housing Architect's Division.

Forms of application may be obtained from the Director of Housing, The County Hall, Westminster Bridge, S.E.1 (stamped addressed envelope required and quote reference A.A.1). Canvassing disqualifies. (816). [5101]

AIR MINISTRY have vacancies for DESIGNER/DRAUGHTSMEN in the Design Branch of the Works Department in the following fields: Architecture, Drainage and Water Supply, Land Survey. Vacancies are mainly in London but there are some in the provinces. If desired, consideration would be given to making appointments for London only. Salaries are on ranges up to £625 with starting pay in accordance with age and qualifications.—Applications, stating age, qualifications, previous appointments (with dates), should be sent to Air Ministry (S.2.H), Cornwall House, London, S.E.1, from which address further details may also be obtained. [5275]

COUNTY BOROUGH OF CROYDON.

SCHOOL ARCHITECT'S SECTION.

ASSISTANT ARCHITECT.

APPLICATIONS are invited from suitably qualified persons for this appointment.

Salary Grade A.P.T. V (a)—£550 s £20 - £610 per annum plus London Weighing of £30 per annum at age 26 and over.

Living accommodation is not offered.

Application forms, available from the Chief Education Officer, Education Office, Katharine Street, Croydon, on receipt of stamped addressed envelope, must be returned to him within 14 days of the appearance of this advertisement.

Canvassing will disqualify.
E. TABERNER, Town Clerk. [5332]
19th March, 1951.

CITY OF NOTTINGHAM.

CITY ENGINEER'S DEPARTMENT. THE GUILDHALL.

CLERK OF WORKS, Salary £435 s £15 - £465, Grade Misc. V.

APPLICATIONS are invited for the above permanent position in the City Engineer's Department.

Applicants should be experienced in building maintenance work and be capable of estimating. The person appointed will be required to pass a medical examination and to contribute to the Corporation's Superannuation Fund.

Applications are to be made on forms to be obtained from the City Engineer and Surveyor (R. M. Finch, Esq., O.B.E., M.I.C.E.), The Guildhall, Nottingham, to whom they are to be returned by not later than Saturday, 14th April, 1951.

T. J. OWEN, Town Clerk. [5336]
The Guildhall, Nottingham.

SUDAN GOVERNMENT.

THE Public Works Department requires an ARCHITECT aged 28 to 36, for service in the Sudan.

Sound experience is required in working up detailed designs from sketches and in the preparation of working drawings for buildings of a public and domestic character. Candidates should be Associates of the R.I.B.A. or hold other recognised professional qualifications in architecture.

Appointment will be on probation for a Short Term Contract of two years at a salary ranging from £E.771 to £E.1,438 per annum.

Cost of living allowance varying between £E.142 and £E.352 per annum according to the number of dependents is at present payable, and, subject to certain limitations, an outfit allowance of £E.60 is payable on appointment. There is at present no Income Tax in the Sudan. Free passage on appointment. Further particulars and application form may be obtained on application to Sudan Agent in London, Wellington House, Buckingham Gate, London, S.W.1. Please mark envelopes "Architect 4/140." [5334]

HERTFORDSHIRE COUNTY COUNCIL.

COUNTY PLANNING DEPARTMENT.

APPOINTMENT OF ASSISTANT DIVISIONAL PLANNING OFFICER.

APPLICATIONS are invited for the appointment of ASSISTANT DIVISIONAL PLANNING OFFICER in the Central Herts Divisional Planning Office at St. Albans. The salary of the appointment is £685 per annum, rising to £760 (Grade VIII, A.P.T.). Applicants will be required to deputise for the Divisional Planning Officer in his absence, and should have considerable experience in drafting planning proposals and in dealing with development applications. Preference will be given to candidates with experience of controlling elevations of buildings. Applicants must be Corporate Members of the Town Planning Institute, and hold other professional qualifications. The successful candidate will be required to provide a car for which travelling allowance will be paid in accordance with the Council's scale.

Forms of application are obtainable from the County Planning Officer, County Hall, Hertford. These are returnable not later than 21st April, 1951. [5337]

ABERDEEN HARBOUR COMMISSIONERS.

HARBOUR ENGINEER'S DEPARTMENT.

APPLICATIONS are invited for the post of ARCHITECTURAL ASSISTANT in the Harbour Engineer's Office, Aberdeen.

Applicants should be under 40 years of age, with experience in structural steelwork, reinforced concrete and general building design and construction. Preference will be given to candidates with some experience of property procedure and the preparation of reports. The salary, £395-£570 according to qualifications, rising by annual increments of £15. The appointment is subject to the Commissioners' Superannuation Scheme and the candidate selected will require to pass a medical examination before appointment.

Applications, stating age and qualifications, with full details of experience, together with copies of recent testimonials, should be lodged with the Harbour Engineer, 15 Rennie Quay, Aberdeen, not later than 30th April, 1951.

Harbour Engineer's Office, Aberdeen. [5340]
31st March, 1951.

CITY OF MANCHESTER.

CITY ARCHITECT'S DEPARTMENT.

APPLICATIONS are invited for the appointment on the permanent staff of a CLERK OF WORKS, salary A.P.T. III, £450 to £495 per annum.

The salary and conditions of service will be in accordance with the National Scheme of Service Conditions.

Candidates should have a practical knowledge of all branches of the building trade, be experienced in the supervision of the erection and maintenance of all classes of buildings, be capable of setting out, measuring up, keeping records and making reports.

Form of application may be obtained from Leonard C. Houghton, B.Arch., F.R.I.B.A., City Architect, Town Hall, Manchester, and should be returned, endorsed "Permanent Clerk of Works," to the same address by Tuesday, 24th April, 1951. Canvassing is prohibited.

PHILIP B. DINGLE, Town Clerk. [5339]
Town Hall, Manchester. 2.
April, 1951.

BRACKNELL DEVELOPMENT CORPORATION

INVITES applications from suitably qualified persons for the following appointment—

ARCHITECT (Housing). Salary £550 s £40 - £750. Applicants should be Corporate Members of the R.I.B.A. and an additional town planning qualification will be an advantage. Students of a recognised School of Architecture who have exceptional ability but lack practical experience and are due to qualify in June, will be considered for this appointment.

The successful applicant will be engaged on the design and construction of large housing layouts, and will work under the direction of Mr. E. A. Ferriby, B.Arch., A.R.I.B.A., A.M.T.P.I., Chief Architect to the Corporation.

The post will be supernumerary under the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination.

Candidates are required to state if they are to their knowledge related to any member of the Corporation or Staff.

Applications, giving full particulars of the candidate's age, qualifications and experience, together with the names of two persons to whom reference can be made, must reach the General Manager, Bracknell Development Corporation, Farley Hall, Biffeld, Bracknell, Berks, on or before 30th April, 1951, marking envelope "Architect." [5338]

ARCHITECTURAL APPOINTMENTS VACANT

ESTABLISHED London firm requires able Assistant. Permanent position. Interested contemporary architecture. Salary £500/650—Box 0790. The Architect and Building News. [5342]

ARCHITECTURAL Assistant required by Gollins, Melvin & Partners, capable working drawings. Salary £450/£550. Office experience essential. Five-day week.—Tel. Museum 0883 for appointment. [5341]

SITUATIONS VACANT

GENTLEMEN who call on Architects, Builders, Town Surveyors, wanted to sell wrought iron gates, grilles, etc. Only illustrations carried. Good commission.—Cleo Metal Works, 51 Conway Place, Leeds, 8. [5335]

FOR SALE

ALL Mouldings, Plain and Embossed, and Embossed Ornaments. Numerous designs.—Darcey's Moulding Mills Ltd., 60 Fownall Road, Dalton, E.B. [10066]

NISSEN Type Huts, ex-Government stock, reconditioned and supplied ready for erection. All sizes in 6ft. multiples, 36ft. x 16ft., 67 1/2 ft. x 16ft. and £59 8s. 0d.; 24ft. x 16ft., £50 12s. 0d. and £41 16s. 0d.; 72ft. x 16ft., £134 4s. 0d. and £106 14s. 0d. Delivered U.K. Plyboard Huts and other buildings. Some 24ft. span Nissen.—Write, call or telephone, Universal Supplies (Belvedere) Ltd., Dent, 32, Crabtree Manway, Belvedere, Kent, Tel. No. Erith 2948. [10057]

STEEL framed, single storey, Industrial Buildings for sale, complete with covering, 184ft. x 188ft., 188ft. x 100ft., and 188ft. x 64ft.—Sharman, 5 Victoria Street, S.W.1. Abbey 5731/2. [5036]

NO Chimney, no Boiler-house needed with B. & A. Electro Boiler. Ideal for hot water and central heating . . . no smoke, no fuel-store, no ash removal. Most compact, can be fitted in any convenient position. Available from 102,000 to 4,000,000 B.Th.U. per hour.—Write for Leaflet 142, Bastian & Allen Ltd., Ferndale Terrace, Harrow, Middlesex. [5268]

PARTNERSHIP

MAJORITY partnership offered in small established practice in the Channel Islands. Applications for further particulars should give details of qualifications, experience and home address.—Box 0791 The Architect and Building News. [5343]

MISCELLANEOUS

USE "Watertight" products for Concrete results when concreting "Liscal," "Quickset," "Surface Dressing." Stocked at most builders' merchants. For particulars apply.—Watertight Cement Co. Ltd., Highfurlong, Blackpool, Tel. Poulton-le-Fylde 315. [10079]

Two useful books for readers of "THE ARCHITECT & Building News"

DOMESTIC WATER HEATING

Basic Engineering Principles of
Electric and Solid-Fuel Installations

By **RONALD GRIERSON,**
M.I.E.E., M.I.Mech.E.

BESIDES setting out the principles of the subject, this book gives a critical analysis of the current practice in the supply of hot water for domestic purposes. The increasing cost of, and enormous demand for, new housing have made the time opportune for such an investigation.

The author deals mainly with the combination of an electric immersion heater and thermostat with a conventional hot-water storage tank, in conjunction with a coal or coke-fired domestic water heater, this being arranged either as a "back-boiler" or as an independent unit.

263 pp. 99 illus. 80 tables 25s. net. By Post 25s. 7d.

Structural Economy For the Architect & Builder

By **GEORGE FAIRWEATHER, F.R.I.B.A.**

THIS book is a critical analysis of traditional forms of construction, first identifying the main characteristics of buildings as determined by the materials and methods used in their construction, then examining these characteristics in relation to their functions and the standards of performance required, and suggesting improvements where these forms of construction fall short of present day requirements.

Two basically different systems have been selected to represent the main features of traditional construction—masonry and light-frame construction. These are examined in several of their more common applications, and the limitations inherent in their use are identified.

178 pp. 74 full page plates. 21s. net. By Post 22s.

Obtainable at leading booksellers everywhere, or direct from the Publishers

ILIFFE & SONS LTD., DORSET HOUSE, STAMFORD STREET, LONDON, S.E.1



Folders for A & B N Detail Sheets

Serviceable folders in double duplex manilla, with pocket to hold one year's issue of sheets, may be ordered now. Price 5/-, postage 6d. extra, from:—

Publishing Department:
"The Architect & Building News,"
Dorset House, Stamford Street,
London, S.E.1.



"I KNOW WE'VE GOT A DETAIL OF THAT SOMEWHERE"—But where? The best way to file your A. & B.N. Detail Sheets so that you can put your hand on the one you want in a matter of seconds, is in a folder specially designed to hold them, clearly labelled on the spine for quick reference in the bookshelf.

INDEX TO ADVERTISERS

Official Notices, Tenders, Auction, Legal and Miscellaneous Appointments on page 33

Adams Hydraulics, Ltd. 26	Crompton Parkinson, Ltd. 14	Kirk & Kirk, Ltd. 23	Price, D. W. 31
Adamite Co., Ltd., The 23	Curfew Doors & Shutters, Ltd. 28	Lewis Bitumen & Asphalt Co., Ltd. 24	Radiation, Ltd. 21
Adamcz, Ltd. 32	Dennison Kett & Co., Ltd. 23	Libraco, Ltd. 32	Reliable Plywood Co., Ltd. 28
Aerialite, Ltd. 29	Dockor Bros. 2	Limmer & Trinidad Lake Asphalt Co., Ltd. 27	Reynolds, H. L., Ltd. 30
Anderson, D. & Son, Ltd. 8	Dohm, Ltd. 31	Lockwood, R. Wm. 24	Shutter Contractors, Ltd. 30
Asco Gas Water Heaters, Ltd. 18	Ellis School, The 24, 25	Lovell, Y. J. & Son, Ltd. 15	Stannah Lifts, Ltd. 23
Bath & Portland Stone Firms, Ltd. 32	Engert & Rolfe, Ltd. 23, 24, 25	Lurie Laboratories, Ltd. 25	Tentest Fibre Board Co., Ltd. 25
Bayliss, Jones & Bayliss, Ltd. 4	Floor Renovations, Ltd. 25	Margolis, M. 25	Thermacoust, Ltd. 16
Betterways, Ltd. 25	Gibson, Arthur L. & Co., Ltd. 32	Marley Tile Co., Ltd. 1	Thompson, John Beacon Windows, Ltd. 6
Blackwell & National Roofings, Ltd. 26	Gimson & Co. (Leicester), Ltd. 25	Marryat & Scott, Ltd. 29	Thorn, J. & Sons, Ltd. 16
Boulton & Paul 19	Gray, J. W. & Sons, Ltd. 25	McCarthy, M. & Sons, Ltd. 24	Twistell Reinforcement, Ltd. 13
Braby, Frederick & Co., Ltd. 12	Hall, J. & E., Ltd. 7	Mealing Bros., Ltd. 23	United Steel Companies, Ltd. 13
Briggs, William & Sons, Ltd. 12	Harvey, G. A. & Co. (London), Ltd. 18	Midland Joinery Works, Ltd. 25	United Strip & Bar Mills 13
Bright's Asphalt Contractors, Ltd. 23	Halle, Ltd. 28	Modern Tile & Floor Co., Ltd. 25	Ward, Thomas W., Ltd. 24
British Electricity 31	Heal's Contracting, Ltd. 20	Morris, Herbert, Ltd. 32	Walker Bros., Ltd. 20
British Iron & Steel Federation 30	Henley's W. T. Telegraph Works Co., Ltd. Outside Back Cover	Mullen & Lumsden, Ltd. 23	Warry Patent Building Equipment Co., Ltd. 25
Brush Plaster Board, Ltd., The 17	Hess & Hill, Ltd. 3	Newman, William & Sons, Ltd. Inside Front Cover	Winterburn, F. A., Ltd. 23
Carcon Company 27	Highways Construction, Ltd. 32	Nu-Swift, Ltd. 25	Young, H. & Co., Ltd. 10
Celcon, Ltd. 22	Jenson & Nicholson, Ltd. 9	Pearbyn Quarries 28	
Chesterman, James & Co., Ltd. 5	Kinners Shutters 32	Porn & Dunwoody, Ltd. 11	
Coates, C. H., Ltd. 25			

CRAWLEY NEW TOWN



Chief Archt.: A. G. Sheppard Fidler, M.A., B.Arch., F.R.I.B.A., A.M.T.P.I.

The illustration shows a standard type factory built for the Crawley Development Corporation, with lantern light barrels. Reinforced concrete design is by Barrel Vault Roofs (Designs) Ltd. Reinforcement supplied by Twisteel.



LONDON: 43 UPPER GROSVENOR STREET, W.1. Telephone GROsvenor 1216. BIRMINGHAM: ALMA STREET, SMETHWICK.
STAFFS: Telephone SMethwick 199L. MANCHESTER: 7 OXFORD ROAD, MANCHESTER, 1. Telephone ARdwick 1691.
GLASGOW: JOHNSTON & PATON LTD., 224 INGRAM STREET, GLASGOW, C.1. Telephone CIty 7661.

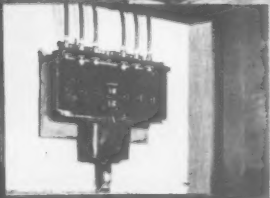
For multi-storey buildings

If you have a problem concerning the distribution of electricity supplies in large multi-storey buildings or small blocks of flats, Henley's can provide the solution:—

The HENLEY Rising Main System for large buildings; HENLEY Metalclad Distribution Boxes for two or three-storey dwellings.



or 2 or 3-storey flats



Henley metalclad distribution box for small blocks of flats as installed by the Midlands Electricity Board for the Birmingham Corporation Housing Dept.

Tybal's Close, London, W.C.1.
A Henley Rising Main Installation
by The London Electricity Board.
Architects, Messrs. HENING & CHITTY.

Please write for Literature
Ref. 46 which gives complete details.

HENLEY
ELECTRICAL
DISTRIBUTION
EQUIPMENT

W.T. HENLEY'S TELEGRAPH WORKS CO. LTD.
51-53 HATTON GARDEN, LONDON, E.C.1